

87th WIPP QUARTERLY**July 20, 2004**

Energy, Minerals and Natural Resources Department
Office of the Secretary Conference Room, Third Floor, Chino Building
1220 South St. Francis Drive, Santa Fe, New Mexico 87505

FINAL AGENDA**ENTERED**

10:00	Introductions	Anne deLain W. Clark
10:05	NMED Hazardous Waste Bureau Update	Steve Zappe
10:35	Draft results from the recent Comprehensive Groundwater Monitoring Evaluation (CME) of WIPP performed under NMED's EPA grant	Carl Chavez, NMED HWB
10:50	NMED DOE Oversight Bureau	Courte Voorhees
11:00	Governor's Task Force Update	Anne deLain W. Clark
11:20	Break	
11:30	<u>DOE Update including:</u> <ul style="list-style-type: none">Status report of activities and plans at WIPPTimeframe for filling Panel 2, initiating disposal in Panel 3, filing certification of construction for Panel 3, PMR to seek change of schedule for closing Panel 2, etc.	DOE
12:00	Lunch	
1:30	<ul style="list-style-type: none">Status of selection of new manager for CBFO, implementation of CBFO reorganizationStatus of Compliance Recertification Application, EPA's review and comments, DOE's responses, what's next, etc.Status of Centralized Confirmation FacilityStatus of NMED DOE Oversight Office in Carlsbad, scope of work, work plan, recruitment, etc.	DOE
2:45 to 3:00 PM break	<ul style="list-style-type: none">Description of Sen. Domenici's legislation (DOD Authorization Act FY 2005) to provide for a competitively awarded contract for independent WIPP oversight – Comparison between this proposal and how EEG was authorized, funded, etc.Plans for reopening the northern experimental area for research activitiesExplanation for removal of WTS key performance metrics from WTS web site: Will some type of periodically updated performance metrics summary be posted in the future?Status of resuming shipments from NTS: Is there remaining inventory from prior characterization efforts, or will the waste be newly characterized upon redeployment of CCP staff and equipment? Timing of shipments?Summary of waste hoist failure event, lessons learnedUpdate on salt pile activitiesReport of release of domestic sewage at WIPP site on June 3, 2004Status of citizen lawsuit against DOE, WTS, and CASTDiscussion of recent Records of Decision with any impact on WIPPDiscussion of need for recent permit modification request to NMED regarding tank waste that was ever managed as high-level wasteINEEL Characterization problems	
4:00	Action Items, Scheduling of Next Meeting, and Adjourn	

040745.5



WIPP Quarterly Review

July 20, 2004

Activities Update for NMED's RCRA Permits Program

1. Ongoing Permitting Process

- Completed Permit Modifications
 - Final agency action, letter issued May 7, 2004
 - Approved with changes the following Class 2 permit modification requests (PMRs):
 - Packaging-specific drum age criteria for new approved waste containers (limited compacted 55-gallon drums to those without rigid polyliners)
 - Allow the use of either track or non-track mounted conveyance cars
- Agency-initiated Modification
 - Proposes to limit waste eligible for disposal at WIPP to the inventory that was identified when the permit was originally issued
 - Public notice issued November 26, 2003
 - Notice of postponement of public hearing issued June 15, 2004
 - Proceeding held in abeyance for indefinite period of time
 - Allow Permittees opportunity to file a PMR that may supplant the NMED modification
- Procedure for Consideration of Tank Waste Class ²3 PMR
 - Prohibits TRU waste from tanks ever managed as high level waste, then established procedure for consideration of such waste under a subsequent Class 3 PMR
 - Received request on July 2, 2004
 - Public meetings scheduled in Carlsbad (August 10) and Santa Fe (August 12, 2004)
 - Public comment period ends on September 7, 2004
 -
- Pending PMRs
 - Construction and Use of Hazardous Waste Disposal Units Class 3 modification request – plan to issue draft permit by September 3, 2004
 - Waste Analysis Plan and Monitoring Revisions Implementing P.L. 108-137 Section 311 Class 3 modification request – anticipate agency action by October 1, 2004
 - Remote-Handled TRU Waste Class 3 modification request – issue second NOD concurrent or within several weeks of Section 311 action
 - Container Management Improvements Class 3 modification request – anticipate agency action by December 1, 2004
 - Closure Plan Amendment (Design Change) Class 3 modification request – uncertain schedule for completion
- Other reports/notifications received
 - Quarterly Progress Report for SWMUs, received May 17, 2004
 - Notice of completion of CBFO reorganization, received June 3, 2004
 - Follow-up report for June 2-3, 2004 domestic sewage release at WIPP, received June 14, 2004

2. RCRA-related Audits

- Audit report approvals
 - ANL-E/CCP Solids Follow-up (A-03-26), approval issued June 1, 2004
 - RFETS Soils Sampling (A-04-08), approval issued July 2, 2004
 - Hanford/CCP HSG Unit (A-04-07), approval issued July 6, 2004
 - Hanford Certification Solids Follow-up (A-04-06), approval issued July 2, 2004
 - LANL Entech HSG (A-03-24), approval issued July 2, 2004
 - AMWTP HSG Unit (A-04-12), approval issued July 2, 2004
- Audit reports for which NMED has requested additional information
 - SRS Recertification (A-04-01), information requested July 6, 2004
 - ANL-E/CCP Recertification (A-04-03), information requested July 8, 2004
 - NTS/CCP Recertification (A-04-04), information requested July 8, 2004
- Audit reports currently under review
 - Hanford CCP Accelerated Process Line (A-03-25), received December 3, 2003, still under review
 - LANL Recertification (A-03-27), information requested July 6, 2004, response received July 14, 2004, under review
 - RFETS Recertification (A-04-10), information requested July 6, 2004, response received July 16, 2004, under review
 - INEEL Labs Recertification (A-04-17), received July 2, 2004
 - LANL CCP Accelerated Process Line (A-04-05), received July 19, 2004
- Audits that NMED has observed and is awaiting an audit report
 - LLNL/CCP Certification (A-04-25), May 3-7, 2004
 - Hanford Recertification (A-04-19), June 14-18, 2004
- Upcoming audits
 - AMWTP Recertification (A-04-22), August 16-20, 2004
 - Hanford/CCP Recertification (A-04-20), September 13-17, 2004 (in Carlsbad)
 - LANL Closeout (A-04-23), September 20-24, 2004
 - NTS/CCP Recertification (A-05-XX), October 4-8, 2004
 - SRS/CCP Recertification (A-05-01), October 26-29, 2004
 - ANL-E/CCP Closeout (A-05-XX), December 7-8, 2004 (in Carlsbad)

3. Compliance issues

- NMED unannounced inspection of WIPP compliance with Permit, January 22-23, 2004
 - Identified one potential violation regarding an open container of hazardous waste
 - Letter of Violation and Return to Compliance issued July 20, 2004
- Waste hoist failure
 - Notified by Permittees of failure of waste hoist on May 21, 2004
 - Unable to emplace waste currently in storage
 - Shipments en route would exceed permitted storage capacity in Parking Area Unit (**PA Unit**) and Waste Handling Building Unit (**WHB Unit**)
 - Initially requested emergency permit at 12:30 PM, May 21, 2004

- Subsequently requested temporary authorization (**TA**) under existing Container Management Improvements PMR at 5:30 PM, May 21, 2004
- NMED approved TA request around 6:30 PM, May 21, 2004
 - Increased PA Unit from 12 to 20 Contact Handled Packages
 - Increased WHB Unit from 45 to 105 cubic meters
 - Effective at issuance until 8:00 AM, May 25, 2004
- NMED Carlsbad staff inspected WIPP throughout the weekend of May 22, 2004, noted no exceedances of permitted storage capacities
- Permittees provided follow-up to TA on May 26, 2004
 - Hoist repaired 1:30 PM Saturday, May 22, 2004
 - Normal operations resumed Monday, May 24, 2004
 - No exceedance of permitted storage capacity
- Receipt of non-WAP compliant waste from AMWTP
 - CBFO issued a corrective action report (**CAR**) 04-032 to AMWTP on June 29, 2004
 - AMWTP had shipped container BN10002892 without it being listed on approved container list
 - Response required by July 9, 2004
 - NMED received verbal notification at 5:00 PM, July 14 from Permittees
 - Shipment from AMWTP had been turned around prior to entry into New Mexico
 - Another shipment had been received earlier in the day and unloaded into storage
 - Stored shipment included additional containers that were not on the approved container list.
 - CBFO issued CAR 04-033 to AMWTP on July 19, 2004
 - AMWTP has misidentified populations of containers from two waste streams eligible for shipment
 - CBFO imposed work suspension until further notice
 - NMED awaiting formal written notice required under Permit Condition I.E.13.c

4. Other activities

- NMED staffing
 - Currently interviewing for last vacancy, expect to extend offer some time in August
- Comprehensive Groundwater Monitoring Evaluation (**CME**)
 - Notified Permittees of intent to conduct field elements of CME (e.g., split sampling) in letter dated May 14, 2004
 - NMED staff Carl Chavez and Kevin Krause observed field activities and collected split samples on May 18-19, 2004 at the WIPP site
 - Permittees responded to various requests for information in letter dated June 18 and received June 25, 2004
 - Permittees responded to additional requests for information in letter dated July 16 and received July 19, 2004
 - NMED developing draft CME report to satisfy EPA grant commitment
- Groundwater Quality Baseline Update Report
 - NMED requested information in letter dated June 4, 2004
 - Held informal discussion on concerns with Permittees via teleconference on June 24, 2004
 - NMED clarified request in letter dated July 2, 2004
 - NMED will assess information upon submittal and continue discussions with Permittees

87th Quarterly Meeting

7/20/04

name	org.	phone	email
ANNE CLARK	EMNRD	476-3224	aclark@state.nm.us
LLOYD PIPER	DOE-CBFO	234-7303	LLOYD@WIPP.NM.US
Roger Nelson	DOE-CBFO	234-7213	roger.nelson@wipp.wv.us
Steve Zappe	NMED/HWB	428-2517	steve.zappe@nmenv.state.nm.us
Steve Holmes	NMED/HWB	428-2521	steve.holmes@nmenv.state.nm.us
Courte Voorhees	NMED/DOE Oversight	827-1541	courte_voorhees@nmenv.state.nm.us
Chuck Noble	NMED/OGC	827-0127	chuck_noble@nmenv.state.nm.us
KEVIN KRAUSE	NMED/HWB	428-2519	Kevin-Krause@nmenv.state.nm.us
George Anastas	Consultant	797-5452	ganas5@comcast.net
Paul Detwile	DOE	234-7300	paul_detwile@wipp.wv.us
EARL POTTER	EARL POTTER, P.A.	988-8019	EPOTTER@wv.us
Carl Chavez	NMED-HWB	428-2518	@SWCP.COM Carl-Chavez@nmenv.state.nm.us

87th Quarterly
7/20/04

SOB - WIPP Handout. Question from Detweiler whether additional notification beyond 7/19 CAR necessary

Carl Chavez CME - Handout

DRE-OB
Certe Ventures

Activities discontinued ~98(?)

Personal background info

Important to reopen office both in town and
© WIPP site. Will include some hazardous waste people who will serve regionally.

Paperwork ready, waiting for money to show up to hire. Will be yearly contracts. Provided NMED press release

Going on far w/ NMED Mgmt this week
(22nd in Hubbs, 23rd in Carlstadt + Roswell)

Admin, sampling & reporting, reviewing conformance to QA docs, systems for env. monitoring, public info, meet w/ city, county, tribal entities, publications, web site, etc.

Task Force
Anne

Handout

Mentioned LES now looking less certain. ??

CBFO
Paul Detweiler

CBFO to be clearinghouse for surplus RFETS equipment
not going to meet FY04 projections for shipments
Room 4 full & closed

Window for NTS shipping (31 shipments) by year end
SRS - corrective/remedial action not clearly noted or taken

INEEL waste streams - will provide prelim report, later

provide validated info.
Eschewed shipping schedule now more uncertainty
due to INTER situation

CCF still thinking about not in baseline
won't submit any more PMS while we work
remaining class 3's.

EPA interprets limit based on volume of payload
container, not inner containers

Next Mtg Thurs Oct 21 - Hub office

Action items

Provide info on CISA violations

DOT - how volume is measured

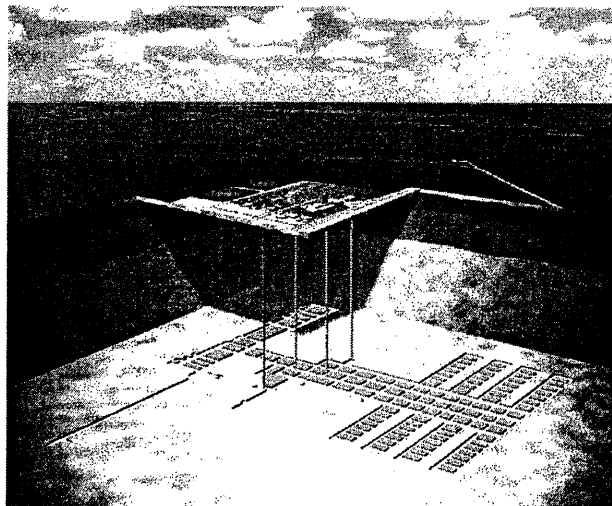
George - previous notices (payload container) left after
DOT - send under the QH mgr description previously
sent to EPA

**Comprehensive Groundwater
Monitoring Evaluation (CME)
of the WIPP Detection
Monitoring Program**

Preliminary Findings

**Carl Chavez
New Mexico Environment Department
Santa Fe, New Mexico**

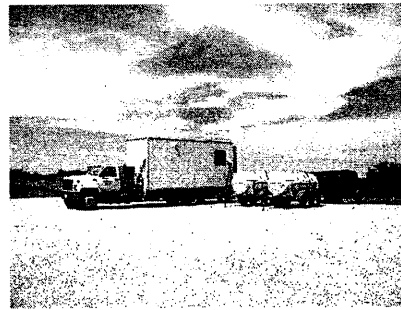
Cutaway of WIPP – Subsurface



Source: DOE

Introduction

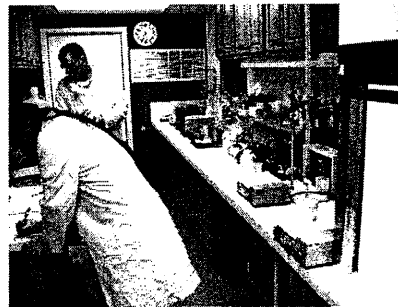
- ◆ **CME**
- ◆ **Basic Elements of CME Report**
- ◆ **Split-Sample Event WQSP-6**
- ◆ **Preliminary Findings**



Source: NMED

What is a CME?

- ◆ Detailed evaluation of the adequacy of the design and operation of the ground-water monitoring systems at RCRA facilities
 - ◆ Objective to determine whether the GW monitoring system is designed & operated to detect releases or define rate & extent of contaminant migration from a regulated unit(s)
 - ◆ Point of Compliance-Culebra Member of Rustler Formation overlying Salado Formation



Source: NMED

CME Fundamental Questions:

- 1) Is the facility currently operating under the correct monitoring program based on statistical analysis?**
- 2) Does the GW monitoring system, as designed & operated, allow for detection or assessment of GW contamination caused by the facility?**
- 3) Do sampling & analysis procedures allow the Permittees to detect & assess the nature & extent of a release of hazardous constituents to GW from the monitored facility?**

Basic Elements of CME Report

- ◆ Introduction**
- ◆ Well Construction**
- ◆ Hydrogeologic Characterization**
- ◆ Field Evaluation**
- ◆ DMW Placement**
- ◆ Action**

CME/O&M Course Materials



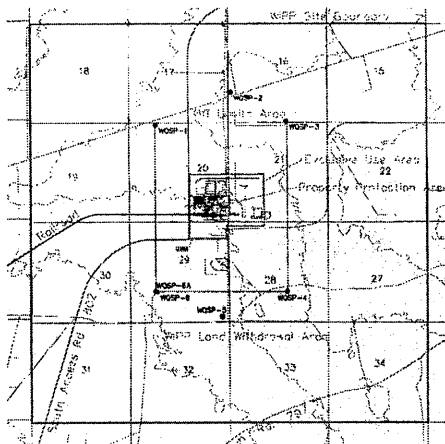
Source: USEPA

Detection Monitoring Wells

- ◆ Seven DMWs
- ◆ WQSP 1 – 6 (Culebra Member of Rustler Formation)
- ◆ WQSP 6a (Dewey Lake Formation)

Source: DOE

- ◆ **Seven DMWs**
- ◆ **WQSP 1 – 6**
(Culebra Member
of Rustler
Formation)
- ◆ **WQSP 6a (Dewey**
Lake Formation)

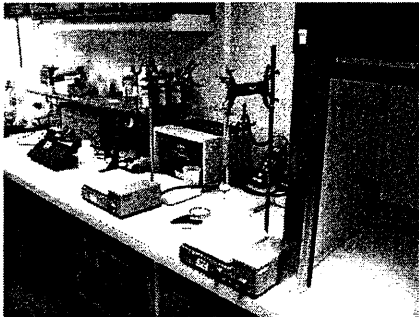


Source: DOE

Culebra Parameters/Constituents

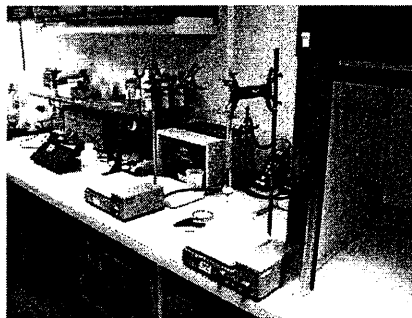
Indicator Parameters

pH (EPA Method 150.1),
Specific Conductance (SC-
Method SM2510B), Total
Organic Carbon (TOC- EPA
Method 415.1), Total
Organic Halide (TOH- EPA
Methods 5320B/9020B),
Total Dissolved Solids
(TDS- EPA Method 160.1),
Total Suspended Solids
(TSS- EPA Method 160.2),
and Density (Method ASTM
D854-92)



Source: NMED

pH (EPA Method 150.1), Specific Conductance (SC- Method SM2510B), Total Organic Carbon (TOC- EPA Method 415.1), Total Organic Halide (TOH- EPA Methods 5320B/9020B), Total Dissolved Solids (TDS- EPA Method 160.1), Total Suspended Solids (TSS- EPA Method 160.2), and Density (Method ASTM D854-92)

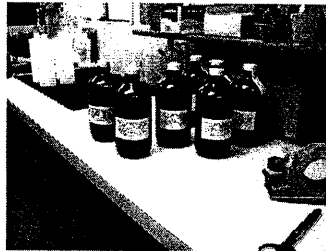


Source: NMED

Culebra Parameters/Constituents

Volatile (Method 8260B) and Semi-volatile Organic (Methods 3510C/8270C) Compounds

Chloroform, 1,2-dichloroethane,
Carbon tetrachloride,
Chlorobenzene, 1,1-
dichloroethylene, 1,1-
dichloroethane, Methylene chloride,
1,1,2,2-tetrachloroethane, Toluene,
1,1,1-trichloroethane, Cresols, 1,2-
dichlorobenzene, 2,4-dinitrophenol,
Hexachloroethane, Isobutanol,
Pyridine, 1,1,2 Trichloroethane,
Trichlorofluoromethane,
Nitrobenzene, 1,4-dichlorobenzene,
cis-1,2-dichloroethylene, trans-1,2-
dichloroethylene, and others...



Source: NMED

Culebra Parameters/Constituents

Metals (Methods 6010B/7470A)

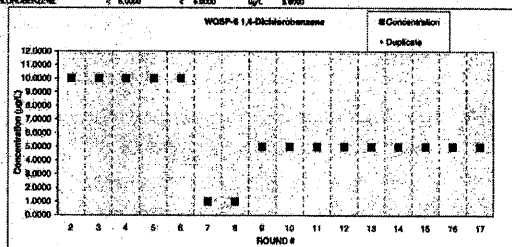
Antimony, Arsenic,
Barium, Beryllium,
Cadmium, Calcium,
Chromium, Lead,
Magnesium,
Mercury, Nickel,
Potassium,
Selenium, Silver,
Thallium, and
Vanadium



Source: NMED

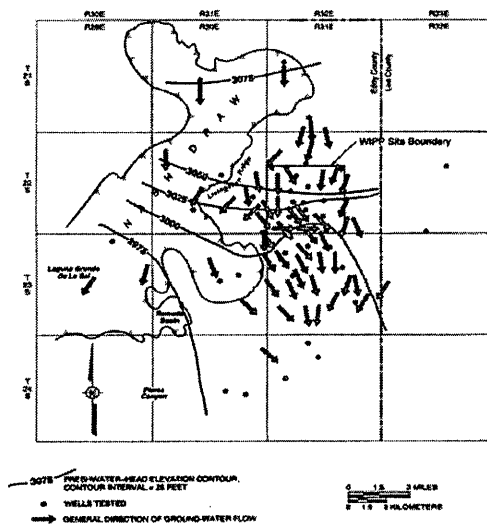
Baseline Example, Round 17

CAS #	PARAMETER	CONCENTRATION	VALUE	UNITS	MINIMUM	SEE UTILITY	AGE	WATER	ROUND	DATE	DATE
			Duplicate		DETECTION		SLAKE	SLAKE		ANALYZED	SAMPLED
					(M)		(AVERAGE)	(AVERAGE)			
106-46-7	1,4-DICHLOROBENZENE	< 16.0000		ug/L	10.0000		< 10.0000		2	10/26/96	10/10/96
106-46-7	1,4-DICHLOROBENZENE	< 10.0000		ug/L	10.0000		< 10.0000		3	07/16/99	06/27/95
106-46-7	1,4-DICHLOROBENZENE	< 10.0000		ug/L	10.0000		< 10.0000		4	04/22/97	04/04/97
106-46-7	1,4-DICHLOROBENZENE	< 10.0000		ug/L	10.0000		< 10.0000		5	07/22/97	06/29/97
106-46-7	1,4-DICHLOROBENZENE	< 10.0000		ug/L	10.0000		< 10.0000		6	06/29/98	06/06/98
106-46-7	1,4-DICHLOROBENZENE	< 1.0000	< 1.0000	ug/L	1.0000		< 1.0000		7	10/26/96	10/10/96
106-46-7	1,4-DICHLOROBENZENE	< 1.0000	< 1.0000	ug/L	1.0000		< 1.0000		8	02/20/98	01/19/98
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		9	11/09/98	11/03/98
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		10	07/11/99	06/10/99
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		11	11/27/02	11/17/02
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		12	05/21/01	05/10/01
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		13	11/10/01	11/07/01
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		14	06/22/02	06/18/02
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		15	10/20/02	11/19/02
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		16	07/18/03	06/07/03
106-46-7	1,4-DICHLOROBENZENE	< 5.0000	< 5.0000	ug/L	5.0000		< 5.0000		17	11/01/03	11/15/03



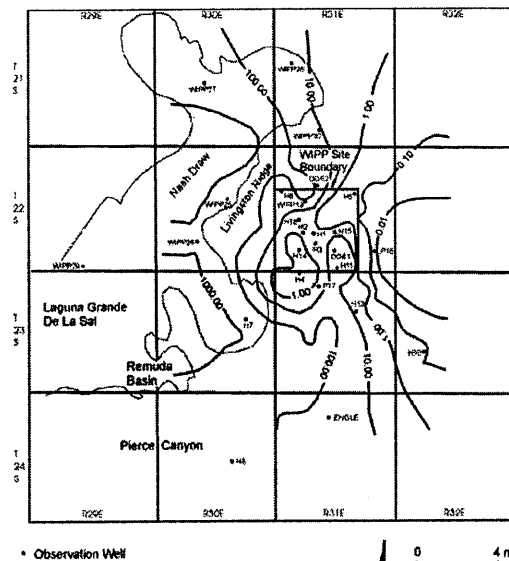
Source: DOE

Culebra GW Flow Directions



Source: DOE

Culebra Transmissivities

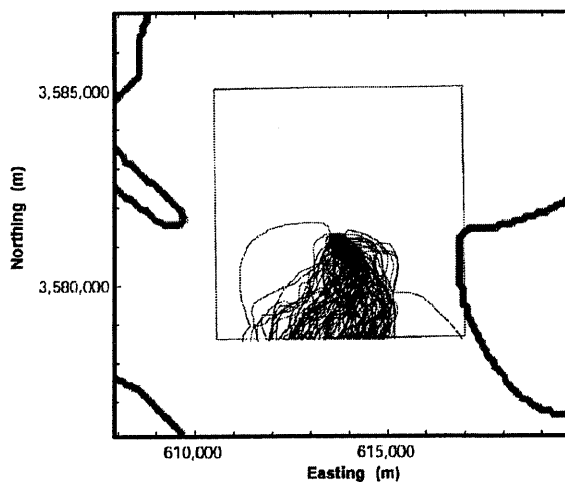


Note: Transmissivities are given in square feet per day.

Source: DOE

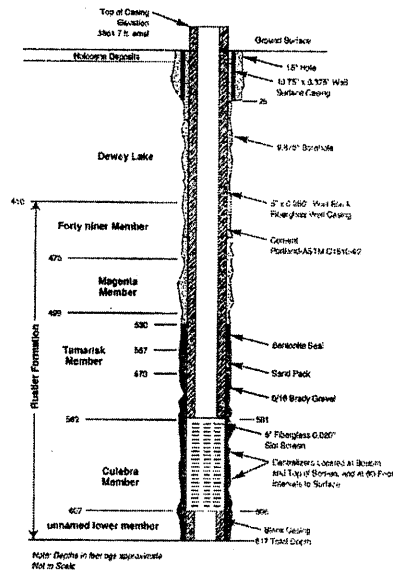
Modeled Release Pathways in CRA

Particle Tracks on WIPP Site (all fields)



Source: DOE CRA

WQSP-6 Construction Diagram

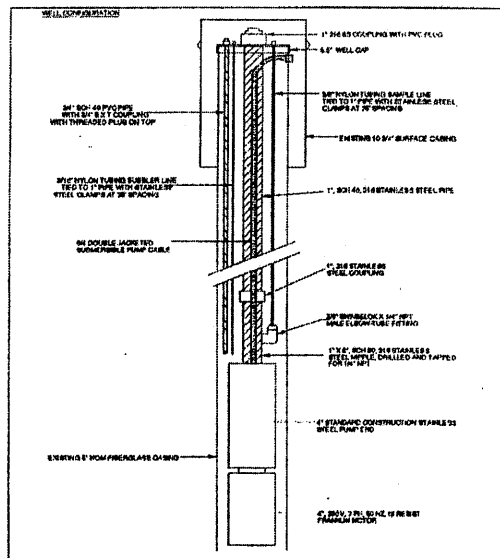


WQSP-6

Source: DOE

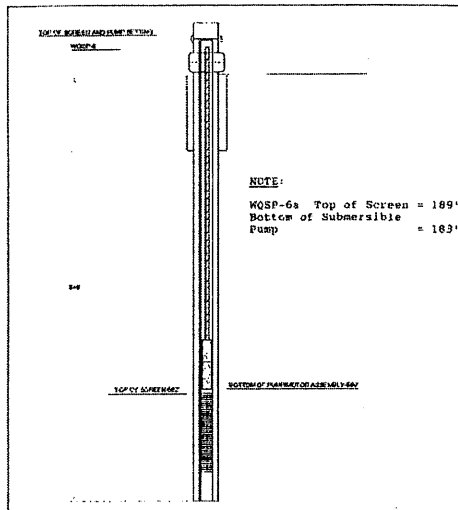
Typical Pump Configuration

Typical Configuration for Pump Installation and Supporting Equipment



Source: DOE

WQSP-6 Pump Configuration



Requires a Grundfos Model 5515-26 fluid end, with Franklin 3 HP 230V, 3 Ph, Stainless Steel motor Set at 580 feet below the top of casing to the bottom of the pump/motor assembly.

Source: DOE

Well Inspection WQSP-3



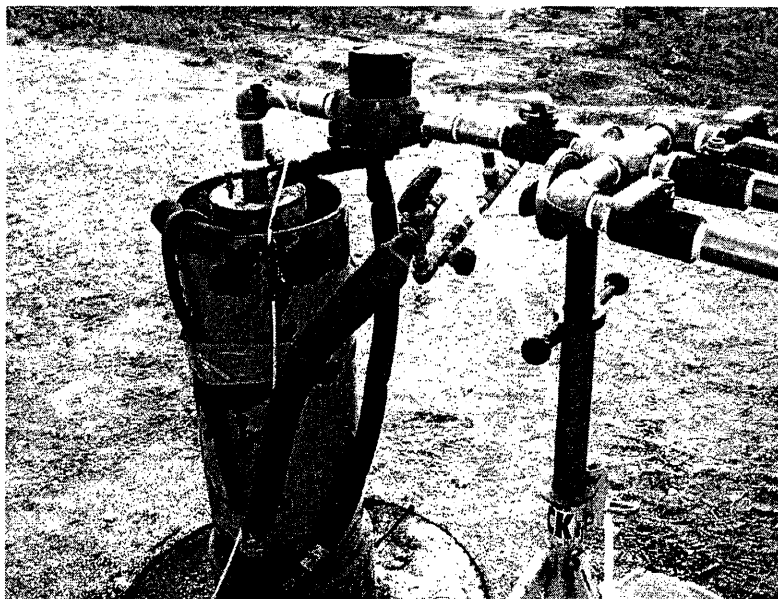
Source: NMED

Well Inspection WQSP-3



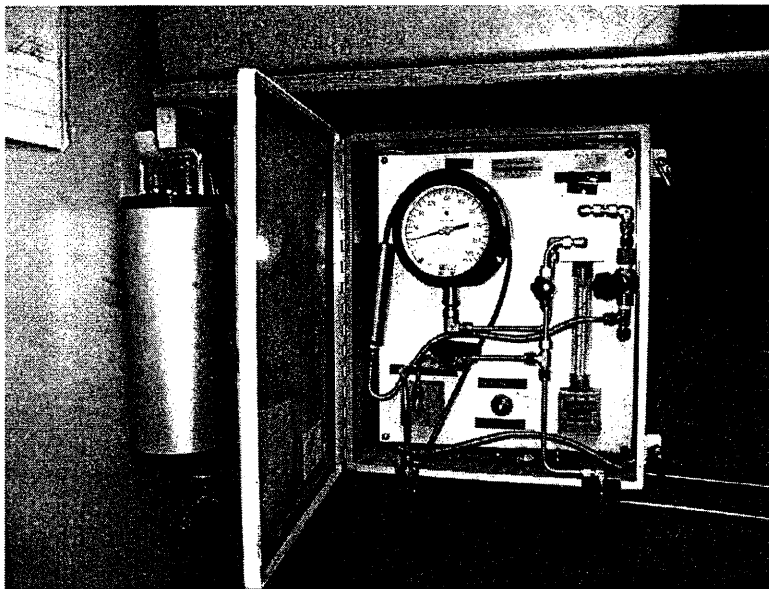
Source: NMED

Split-Sample Event WQSP-6



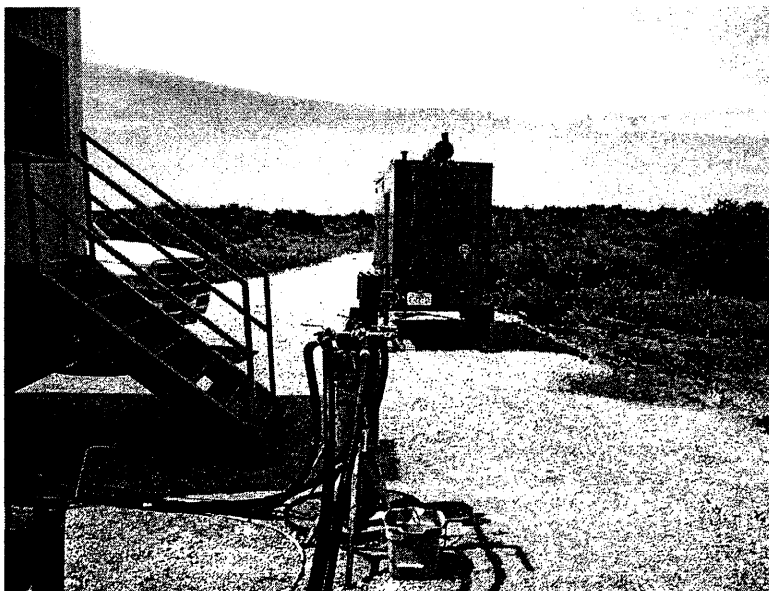
Source: NMED

Split-Sample Event WQSP-6



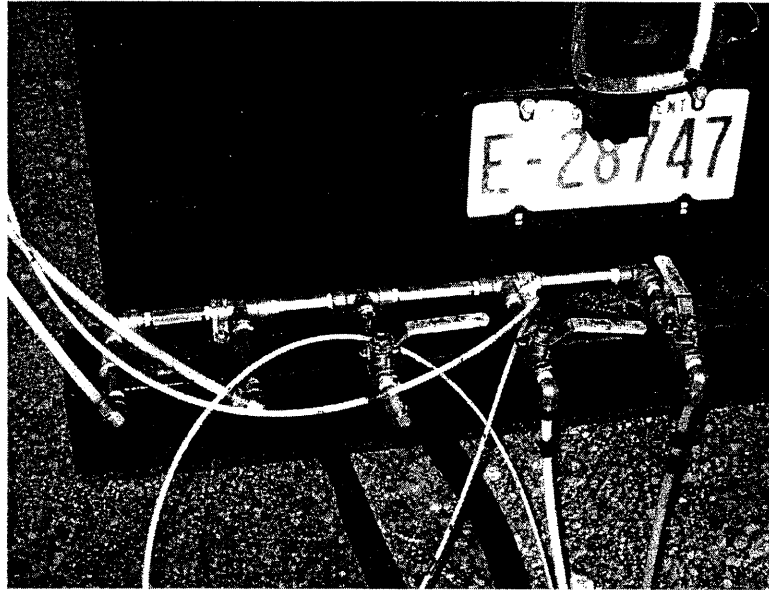
Source: NMED

Split-Sample Event WQSP-6



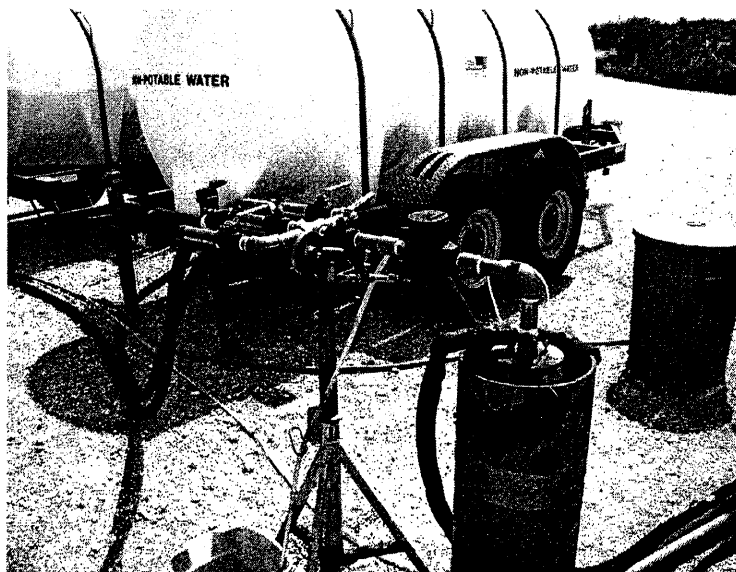
Source: NMED

Split-Sample Event WQSP-6



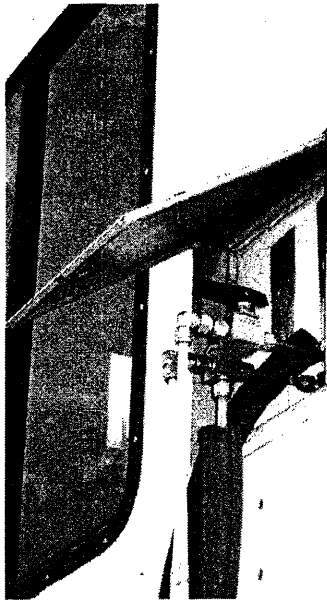
Source: NMED

Split-Sample Event WQSP-6



Source: NMED

Split-Sample Event WQSP-6



Source: NMED

Split-Sample Event WQSP-6



Source: NMED

Split-Sample Event WQSP-6



Source: NMED

Split-Sample Event WQSP-6



Source: NMED

Analytical Results DOE vs. NMED at WQSP-6

PARAMETER	METHOD	DOE	NMED	Rd# 17 ¹
INDICATORS				
Density	ASTM D854-92	1.01	1	1.01
pH (su)	EPA 150.1	7.76	7.0	7.8
Specific Conductance (umhos/cm)	SM2510B	20,800	22,000	20,300
TDS (mg/L)	EPA 160.1	15,420	16,000	14,600
TOC (mg/L)	EPA 415.1	1	U 1	ND (1.00)
TOH (mg/L)	EPA 5320B/9020B	2.7	82	3.90
TSS (mg/L)	EPA 160.2	1	30	ND (1.00)

Source: NMED

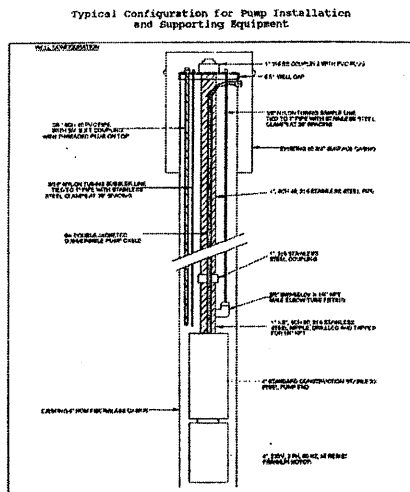
Preliminary Findings

◆ Well Construction

- ◆ Sampling procedure based on well construction & hydraulics (DMW specific capacity testing, pump intake setting, etc.)
- ◆ TOC elevation discrepancy between WQSP-6 & 6a
- ◆ Resurveying wells
- ◆ Malfunctioning equipment (i.e., bubbler, pressure transducer, etc.) & physical SWL measurements

◆ Hydrogeologic Characterization

- ◆ Transmissivity (SE of WIPP) & rising water levels
- ◆ TOC elevation discrepancy between WQSP-6 & 6a
- ◆ Resurveying wells
- ◆ Baseline & statistical applications (high TDS)



Source: NMED

Preliminary Findings (continued)

♦ Field Evaluation

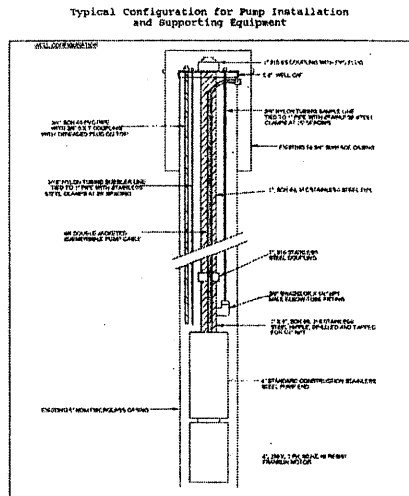
- ♦ Filtering & elevated levels of TOH samples
- ♦ Transmissivity (SE of WIPP) & rising water levels
- ♦ WIPP Procurement Docs & consistency w/ SOPs
- ♦ Reference to QA/QC plan & record keeping in SOPs
- ♦ Reevaluation of sampling procedures (e.g., flow rates in sampling WPs, specific capacity tests per DMW, pump intake, etc.)
- ♦ Comments on WPs & SOPs
- ♦ QA/Technical Audit of TraceAnalysis Lab

♦ DMW Placement

- ♦ Pump intake settings
- ♦ Representativeness of Culebra samples

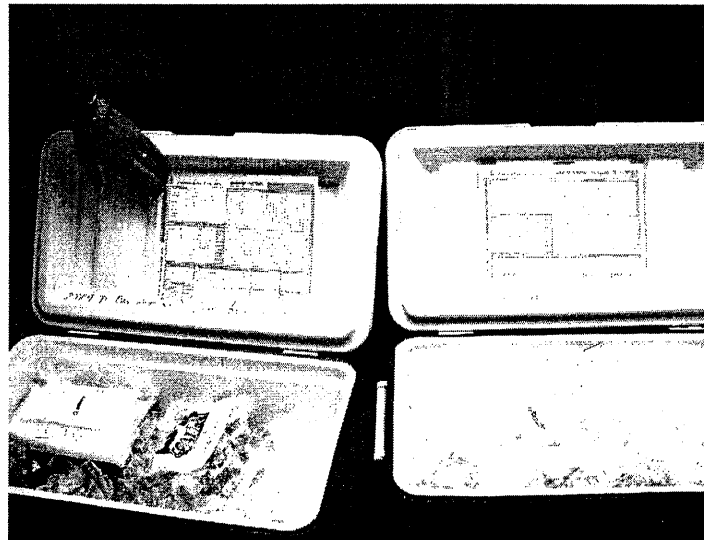
♦ Action

- ♦ Violations



Source: NMED

Questions?



Further Information

◆ **NMED WIPP web site**

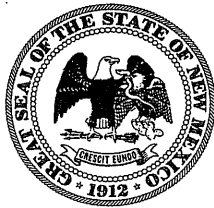
❖ <http://www.nmenv.state.nm.us/wipp/>

◆ **E-mail**

❖ carl_chavez@nmenv.state.nm.us

◆ **Phone**

❖ (505) 428-2518



BILL RICHARDSON
GOVERNOR

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Harold Runnels Building
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Telephone (505) 827-2855
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RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

July 20, 2004
Immediate Release

Contact: Jon Goldstein, NMED Communications Dir.
Phone: (505) 827-0314

Environment Secretary Ron Curry Secures Federal Funding for Improved WIPP Oversight; NMED to Add Seven to Carlsbad Staff

(Santa Fe, NM) — New Mexico Environment Department (NMED) Secretary Ron Curry today announced that the U.S. Department of Energy (DOE) had approved his request for \$600,000 in federal funds to reopen the Department's DOE Oversight Bureau office in Carlsbad. Due to federal funding cuts, this office was closed in 1996.

"With these funds NMED will be able to increase its presence in Carlsbad and improve oversight of the WIPP facility," said Secretary Curry. "These seven NMED employees will do vital work, looking over WIPP's shoulder and making sure that this operation is run safely and properly."

Personnel to be hired by NMED include one office manager, five technical staff and an administrative assistant. Veterans of the recently closed Environmental Evaluation Group (EEG) office are encouraged to apply. NMED hopes to have this office open by late summer.

"I hope that this office will pick up where EEG left off," said Secretary Curry.

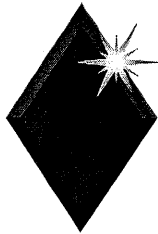
NMED's DOE Oversight Bureau (DOE OB) currently operates at Los Alamos and Sandia National Laboratories. At these sites, these Department personnel engage in non-regulatory oversight and scientific studies of environmental and worker safety issues. At Los Alamos, work has included groundbreaking studies of contaminants like perchlorate, PCBs and plutonium runoff since the Cerro Grande fire. The DOE OB is funded through an Agreement in Principal (AIP) with DOE. Staff at WIPP will work on similar issues and operate under the same agreement.

The regulatory role of NMED's Hazardous Waste Bureau in permitting and enforcement issues at WIPP will remain unchanged.

In his June 16 letter to Secretary Curry announcing the funding approval, WIPP's Acting Manager R. Paul Detwiler wrote: "DOE believes that the proposed oversight office for the WIPP program would be a constructive addition to the existing AIP...It is a timely innovation that should improve the relationship between DOE and the State of New Mexico by providing oversight and monitoring of the now fully operational WIPP repository."

NMED is currently accepting comments and suggestions on what should be included in this office's scope of work. These should be addressed to Charles Lundstrom, NMED's Water and Waste Management Division Director.

State of New Mexico
Radioactive Waste Consultation Task Force
Update



87th WIPP Quarterly Meeting
July 20, 2004

Anne deLain W. Clark
NM Energy, Minerals and Natural Resources Department
Santa Fe, New Mexico 87505
(505) 476-3224

Task Force

- ❖ 2 WIPP Working Group meetings
- ❖ Attended DOE Transportation External Coordinating (TEC) Work Group meeting in Albuquerque.
- ❖ Received reply from NRC the 8 governors' letter objecting to elimination of double containment rule.
- ❖ Attended WGA TAG meeting in San Diego.
- ❖ Finalized the WGA TAG Report to the Western Governors on the Status of the WIPP Transportation Safety Program.
- ❖ Submitted final budget request to DOE for 2005-2006.
- ❖ Jenny Tobin started in early June as a NM Fellow working w/ Dr. Debra Thrall on REAP.
- ❖ Jenny Tobin is presenting by invitation at the Institute of Nuclear Materials Management's (INMM) 45th Annual Meeting in Orlando this week. "Nuclear Reactions: A Summary" is a compilation of surveys done in NM & the rest of the nation by the Institute for Public Policy at the UNM.
- ❖ Worked out funding issues with DOE resulting from disparate accounting systems.
- ❖ DOE has provided transitional funding until final approval for the 2005-2006 is given.
- ❖ Met with Dr. Cline of UCLA about the possibility of a Deep Underground Science & Engineering Laboratory at WIPP.

Office of Emergency Management

- ❖ Ordered 50 Navy surplus beta-gamma survey meters (AN/PDR-27) through the Homeland Defense Equipment Reuse program for distribution to Native American tribal responders; and additional gas masks for locals responders.
- ❖ Initialized the development of a new radiation response training curriculum based around OSHA training levels and NFPA competencies.
- ❖ 500 radiation reference cards printed.
- ❖ Met with Mora County Volunteer Fire Chiefs Association to promote training and explore the possibility of doing WIPPTRAX exercise in Mora County.
- ❖ Exchanged survey meters and discussed training & equipment options with Roswell, Carlsbad, Hobbs & Lovington.
- ❖ Presented on State's role in radiological emergency response at DOE RAPTER trainings in Albuquerque in April and May.
- ❖ Participated in the May RAPTER tabletop and drill.

Office of Emergency Mgmt (cont.)

- ❖ Issued first HDER meters to Nambe and Pojoaque Pueblo.
- ❖ Submitted request to US NRC to review a copy of the NEF security plan.
- ❖ Worked with George Anastas, EEG, to field check 50 beta-gamma survey meters received through HDER program.
- ❖ Taught Hazmat Awareness class at Nambe Pueblo.
- ❖ Met with personnel from Sandia laboratory regarding a program for consequence assessment decision support for atmospheric releases of hazardous materials.
- ❖ Taught MERRTT class at Pojoaque Pueblo.
- ❖ Participated in DOE Transportation External Coordination Working Group (TEC) meeting in Albuquerque.
- ❖ Exchanged survey meters for Grants Fire Department.
- ❖ Conference call with LES officials about transportation issues regarding proposed National Enrichment Facility.
- ❖ Met with Gary Kayser, the new Emergency Manager for Torrance County to brief him on the WIPP Safe Transportation Program.

State Police Division

- ❖ Equipment purchased to outfit 40 more District and Headquarters Emergency Response Officers with ERO bags. When equipment arrives, they will be distributed.
- ❖ 9 new Headquarters ERO's appointed through Chief's Office. In any WIPP incident headquarters, ERO's will be contacted.
- ❖ Coordinated training of NMSP Supervisors in HAZMAT OPS, and WMD Awareness in Las Cruces.
- ❖ 11 new V-top suits and 36 Tasers purchased for NMSP Emergency Response Team. This team responds to WIPP Incidents and has Escorted WIPP Vehicles.
- ❖ 15 lap top computers equipped w/ HAZMAT applications purchased for HQ ERO's, allowing them to assist with Hazmat incidents (Including WIPP Incidents) when away from their desks or on an assignment.
- ❖ Taught two classes on Critical Incident Management to NMLEA Basic Cadets.
- ❖ Coordinated ICS Beginning-Advanced training for NMSP Supervisors in Roswell.
- ❖ Coordinated and taught NMSP Supervisors in Critical Incident Management in Las Cruces.
- ❖ Revising NMSP Headquarters ERO Field Operations Guide and NMSP District ERO Field Operations Guide for HAZMAT Response.
- ❖ Working with NM DOT to get all field workers trained to Operations Level HAZMAT response.

Motor Transportation Division

- ❖ En-route inspections (radiological & mechanical, CVSA Level VI) conducted at Raton Port of Entry and Loving Inspection site for all WIPP shipments entering the State of New Mexico during the quarter.
 - ❖ HNFD – 31
 - ❖ INEEL – 15
 - ❖ ANLW – 1
 - ❖ RFETS – 176
 - ❖ SRS – 68
- ❖ 16 Federal Motor Carrier Safety Regulations violations on 7 WIPP shipments:
 - ❖ 8 vehicle violations
 - ❖ 3 driver violations
 - ❖ 9 minor violations – not affecting the safe operation of the vehicle
 - ❖ 2 critical violations – affecting the safe operation of the vehicle
- ❖ Under the Level VI Inspection criteria, 3 vehicles were placed out-of-service. None of these would have been placed out-of-service under the NAS Inspection criteria.

Motor Transportation Div.(cont.)

- ❖ Attended Annual CVSA Conference held in Little Rock, Arkansas. Chaired CVSA Radioactive Materials Sub-committee.
- ❖ MTD WIPP Coordinator & NM DOT WIPP Coordinator met in Raton with NM DOT and MTD staff concerning proposed Inspection Bay to be built at Raton POE.
- ❖ Attended DOE-TEC Meeting in Albuquerque and assisted CVSA/DOE Program Director in presentation of CVSA Updated Interim Report on WIPP Inspections.
- ❖ Taught CVSA Basic Level VI Inspection Class to Arizona Department of Public Safety personnel at Flagstaff Community College and trained a new trainer from West Virginia.
- ❖ Conducted Hazardous Materials Inspection Refresher Training and CVSA Level VI Refresher Training at Anthony POE.
- ❖ Taught CVSA Basic Level VI Inspection Class to NM MTD personnel at the Bernalillo County Sub-station in Albuquerque and trained a new trainer from California.
- ❖ Coordinator and MTD Hazardous Materials Training Team prepared and conducted the Non-Bulk and Cargo Tank/Bulk Packaging Hazardous Materials portion of the 2004 NM Challenge Competition. Challenge Competition was won by a CVSA Level VI certified inspector who will represent NM at National Competition in Salt Lake City in August. During the Awards Ceremony on 6/12/04 the MTD WIPP Coordinator received the MTD Employee of the Year Award.
- ❖ Taught CVSA Basic Level VI Inspection Class to Idaho State Police personnel at ISP POST Academy, Meridian, Idaho.
- ❖ 2 – Ludlum Model 2241 were purchased for use in conducting CVSA Level VI inspection of WIPP shipments.

Department of Health

- ❖ Attended Area HazMat First Responders meeting in Gallup, NM with Pipeline Operators. Updated Contact information obtained and questions about WIPP Medical Preparedness answered.
- ❖ Conducted the "Hospital Response to Hazardous Materials Course" at Artesia General Hospital in Artesia, NM.
- ❖ Met with the Emergency Dept Nurse Manager of Las Vegas NE Regional Hospital. Discussed new hospital's HazMat Response capabilities and offered suggestions to improve those capabilities. Course will be taught in the fall at "Alta Vista Hospital".
- ❖ Conducted the "Hospital Response to Hazardous Materials Course" at the Hospital in Roswell, NM
- ❖ Attended the National Disaster Response Conference in Dallas, Texas.
- ❖ Conducted HazMat workshop with hospital representatives in Northern, NM. Hazmat Shower set-up demonstrated, also thorough discussion of respiratory protection and new guidance document from OSHA regarding HazMat Response and Hospitals. Approximately 30 people in attendance.
- ❖ Participated in EMS Statewide infrastructure meeting in Ruidoso, NM. Theme was training and WIPP/Hazmat training discussed with EMS Regional offices and Training Institutions.

Department of Health (cont.)

- ❖ Conducted planning meeting at Sheraton Old Town Albuquerque for EMS Conference to be conducted in July 2004.
- ❖ Attended the ICS Training and Train-the-Trainer ICS Training in Albuquerque.
- ❖ Attended the HRSA Retreat in ABQ.
- ❖ Attended the MCI/START Triage workgroup meeting in Albuquerque.
- ❖ Attended the HRSA Workgroup meeting in Albuquerque
- ❖ Attended the Educational Training Advisory Committee meeting at the Center for Disaster Medicine in Albuquerque
- ❖ Evaluated UNMH Emergency Dept. Radiation Response Drill
- ❖ Exchanged DTPA and updated consent forms with Miner's Colfax Medical Center in Raton, New Mexico. Also met with Raton Fire Chief and they were given six (6) NBC Gas Masks to use for patient transport of contaminated patients.
- ❖ Met with Las Vegas, NM Fire Chief and discussed emergency medical preparedness, MCI Trailers, and HazMat Response Equipment. Also given four (4) gas masks with NBC Filters to provide to local responders to use for patient transport of contaminated patient. Will provide two (2) more gas masks on next trip out to Las Vegas.
- ❖ Met with Santa Rosa Guadalupe Medical Center, Exchanged Ludlum Geiger Counters and discussed their Radio Communications difficulties. Radio problems passed on to the EMS Radio Communications Manager at the EMS Bureau.

NMED Radiation Control Bureau

- ❖ New radiation portal monitors soon fully operational at Gallup and San Jon POEs. New detectors will have capability to monitor for gamma and neutrons, and to discern man-made from naturally occurring radioactive materials. On an annual basis, the 2 new sites will have surveillance & monitoring capability to scan approximately 1.6 million highway transportation shipment payloads.
- ❖ System will alert port inspectors of shipment payloads that might require a further investigation or a request for technical support from the Radiation Control Bureau.
- ❖ Raton Port-of-Entry radiation monitor continues to be fully operational. Data collected from the system (06/03-06/04) includes:

❖ Total number of trucks monitored	138,855
❖ Number of Alarms	1,395
❖ % of Trucks Yielding Alarms	1%
❖ Maximum 1 meter reading recorded	0.948 mR/hr
❖ Mean 1 meter reading	0.015 mR/hr
- ❖ Alarms further subdivided into three other categories:
 - ❖ Six sigma alarms (833 alarms at this setting): the interval between the mean or average of the background count level and the alarm level is equal to six (6) standard deviations.
 - ❖ Priority Alarms (306 alarms at this setting): a setting that is 10 times the sigma value above.
 - ❖ Number of alarms greater than 10 mR/hour (0 alarms at this setting).
- ❖ All alarms generated with the system will be investigated using the protocols outlined in the enclosed flow diagram.

none were WIPP Shipments

State Fire Marshal

(unchanged from July 2003 report)

- Traveling WIPP route, providing information on JPA and a person to person relationship.

The following local governing bodies are funded through JPAs:

City of Artesia	\$7,000	support regional response haz/mat team
City of Albuquerque	\$7,000	support regional response haz/mat team
City of Carlsbad	\$7,000	support regional response haz/mat team
City of Gallup	\$7,000	support regional response haz/mat team
City of Hobbs	\$7,000	support regional response haz/mat team
City of Raton	\$7,000	support regional response haz/mat team
City of Roswell	\$7,000	support regional response haz/mat team
City of Santa Fe	\$7,000	support regional response haz/mat team
City of Vaughn	\$5,000	support regional response haz/mat team
Chavez County	\$11,000	support first responder training
Cibola County	\$10,000	support first responder training
Colfax County	\$7,000	support first responder training
Eddy County	\$5,000	support first responder training
McKinley County	\$15,000	support first responder training
San Miguel County	\$7,000	support first responder training
Santa Fe County	\$15,000	support first responder training
Torrence County	\$7,000	support first responder training
Total Funding	\$138,000	





UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

May 5, 2004

The Honorable Bill Richardson
Governor of New Mexico
Santa Fe, New Mexico 87300

Dear Governor Richardson:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter dated March 11, 2004, in which you requested reconsideration of the Commission's decision to remove the packaging requirement for double containment for the shipment of certain forms of plutonium. The Commission removed the double containment requirement in the final rule amending Title 10 of the Code of Federal Regulations Part 71 (Part 71), "Compatibility with International Atomic Energy Agency Transportation Safety Standards (TS-R-1) and Other Transportation Safety Amendments" (69 Federal Register 3698; January 26, 2004). As presented in more detail below, the Commission believes that it acted appropriately in this matter to maintain reasonable assurance of adequate protection of public health and safety and the environment.

NRC's decision to eliminate the double containment packaging requirement was part of a rulemaking action, rather than a packaging certification action. Although the final NRC rule will permit DOE to consider an alternate Type B package without double containment for the shipments to WIPP, nothing in our rule preempts or precludes any arrangements between States and DOE with respect to particular shipment campaigns. The NRC decision does not invalidate the existing TRUPACT-II design, which still meets all remaining applicable requirements of Part 71. Thus, DOE could continue to use the TRUPACT-II to ship transuranic waste to WIPP. Moreover, DOE cannot change the design of the TRUPACT-II to remove the double containment without demonstrating that it is safe, and only with NRC review and approval of the design change. I would like to clarify that the double containment criteria do not require that each container be independently qualified as a Type B transportation container. For example, the double containment aspect of the TRUPACT-II design is achieved by the use of a thin-walled steel container placed within a thick-walled outer package that together form a single unit evaluated against Part 71. The significance of this design is that the inner container itself is not approved as a stand-alone transportation package.

Part 71 sets forth safety performance requirements for transport package design and use to ensure safe transport of their hazardous contents under both routine and accident conditions, but not sabotage conditions. Type B packaging standards, including packages for plutonium shipments, must provide reasonable assurance that public health and safety and the environment are protected during the transportation of radioactive material. Although NRC's Part 71 rulemaking focused on bringing NRC's regulations into alignment with the 1996 transportation safety standards of the International Atomic Energy Agency (IAEA), NRC also reviewed the Part 71 rules for possible improvements. As part of the final rule, risk-informed modifications were made to address shipping requirements for certain forms of plutonium.

We share your interest in ensuring radioactive material security while in transport. Since September 11, 2001, the Commission has issued multiple guidance documents and additional security requirements to the NRC licensees transporting radioactive materials. These guidance documents and additional security requirements have been tailored to the specific material being shipped and the risks associated with that material. Additionally, the NRC has performed vulnerability assessments on transportation packages for certain types of radioactive materials. We are also aware that the U.S. Department of Energy (DOE) has performed its own assessments of the risks associated with transportation of radioactive materials. With respect to shipments to the Waste Isolation Pilot Plant (WIPP), DOE is responsible for assuring or providing the security associated with such shipments, including potential sabotage. The NRC's role in shipments to WIPP is to approve, after they are found to be safe, the designs of packages used to transport the radioactive material to that facility.

We regret the impression that the removal of the double containment requirement may reduce public confidence. The NRC reviewed the petition that was submitted to eliminate double containment in the context of safety. In this review, NRC staff considered comments received from three publications in the Federal Register on this issue and six public meetings held across the country. The NRC staff also reviewed the available regulatory history for double containment. We believe the Commission has kept the public involved and informed of our actions on this rule and the reasons for our action.

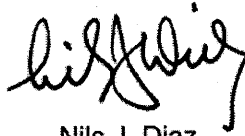
With regard to the Environmental Evaluation Group's (EEG's) July 26, 2002 comments, it is true that, due to an administrative error, our original rulemaking package did not discuss the comments. As soon as the oversight was identified, staff performed a review and concluded that the EEG comments did not raise any new issues. The staff developed responses to the EEG comments that were communicated to the Commission before the final rule was issued. The Federal Register Notice reflected consideration of the EEG comments. Additional details on the disposition of the EEG comments are provided in the enclosed letter from M. Virgilio to M. Silva, dated March 1, 2004. Furthermore, on April 8, 2004, EEG provided us with another letter setting forth five concerns regarding the double containment issue. Currently, our staff is preparing a response to that letter, and we will provide it to EEG in the near future.

In a related matter, the NRC has recently received and docketed an application from Packaging Technology, Inc., on behalf of the Department of Energy (DOE), for approval of the TRUPACT-III transportation package design. The application requests approval of TRUPACT-III based on finite element computer modeling and a series of half-scale drop (impact) tests. Depending on the quality and completeness of the application, the NRC staff anticipates that its review of the TRUPACT-III design will take approximately 12 months. The application is publicly available under NRC docket number 71-9305. The results of the NRC's evaluation will also be made publicly available, and meetings with the applicant during the review process will be formally announced and open to the public.

A member of the NRC staff, Mr. Earl Easton, Senior Level Specialist for Transportation, attended the Western Governors' Association meeting in San Diego, California, on April 28-29, 2004. Mr. Easton provided a presentation on the double containment issue, and he would be pleased to discuss the matter further with any of your representatives. Mr. Easton can be contacted at 301-415-8520.

Finally, I want to assure you that the Commission shares your long-standing interest in the safety of transuranic waste shipments to the Waste Isolation Pilot Plant (WIPP). NRC has been actively involved in the approval of transportation packages used to ship transuranic waste to WIPP, such as the TRUPACT-II, since 1988, and stands fully prepared to meet its future commitments under the WIPP Land Withdrawal Act (Public Law 102-579) regarding the approval of transportation packages for WIPP shipments.

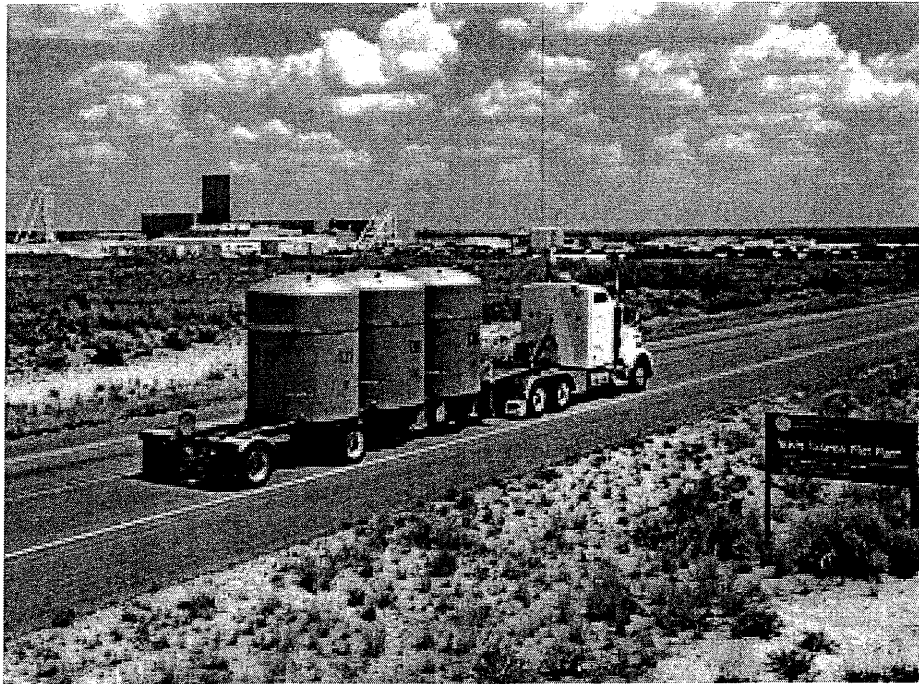
Sincerely,

A handwritten signature in black ink, appearing to read "Nils J. Diaz", with a stylized, cursive script.

Nils J. Diaz

Enclosure: As stated

**REPORT TO WESTERN GOVERNORS
ON THE STATUS OF THE
WIPP TRANSPORTATION SAFETY PROGRAM**



**DEVELOPED COOPERATIVELY THROUGH
THE WESTERN GOVERNORS' ASSOCIATION
WIPP TRANSPORTATION TECHNICAL ADVISORY GROUP**

**Consisting of the States of
Arizona, California, Colorado, Idaho, Nebraska, Nevada,
New Mexico, Oregon, Texas, Utah, Washington, and Wyoming**

June 2004

I. EXECUTIVE SUMMARY

For the past five years, the Waste Isolation Pilot Plant (WIPP) located near Carlsbad, New Mexico has received truck shipments of radioactive transuranic (TRU) waste¹ from seven U.S. Department of Energy (DOE) facilities.² Over 90 percent of the existing inventory of TRU waste is located in Western states. To date, more than 2,500 or about 13 percent of the expected total number of shipments have arrived safely at WIPP and been permanently disposed 2,150 feet below the surface. (See Figure 1.) During this time, only one minor collision occurred.³ Fortunately, that accident, which involved a drunk driver crashing his vehicle into the rear of a loaded truck near the WIPP facility, did not result in any injuries or release of radioactive material into the environment.

At this juncture, the WIPP transportation safety program with its enviable safety record must be considered an overwhelming success. There is one underlying reason for this. From the beginning and continuing today, an extraordinary level of care and attention has been brought to every detail of each shipment to help ensure Western Governors' primary objective of a "safe and uneventful" shipping campaign is met. It is clear, however, this attention to detail to all elements of the campaign would never have been possible if Western states along the shipping corridor had not advocated cooperation with each other and the DOE in the development of a transportation safety program. Multi-state collaboration and problem solving began more than 15 years ago when corridor states banded together under the auspices of the Western Governors' Association (WGA). This led to the formation of a regional group, called the WGA WIPP Transportation Technical Advisory Group (Technical Advisory Group)⁴, whose primary function

¹ Radioactive transuranic (TRU) waste consists primarily of discarded items, such as gloves, glassware, tools, and rags contaminated with plutonium during weapons production. This waste is contaminated with man-made radioactive materials with atomic numbers greater than uranium, such as plutonium, americium, and curium. TRU waste is officially defined as waste contaminated with alpha-emitting radionuclides, having atomic numbers greater than 92 and with half-lives greater than 20 years and in concentrations greater than 100 nanocuries per gram of waste. TRU waste is further described in Section II.

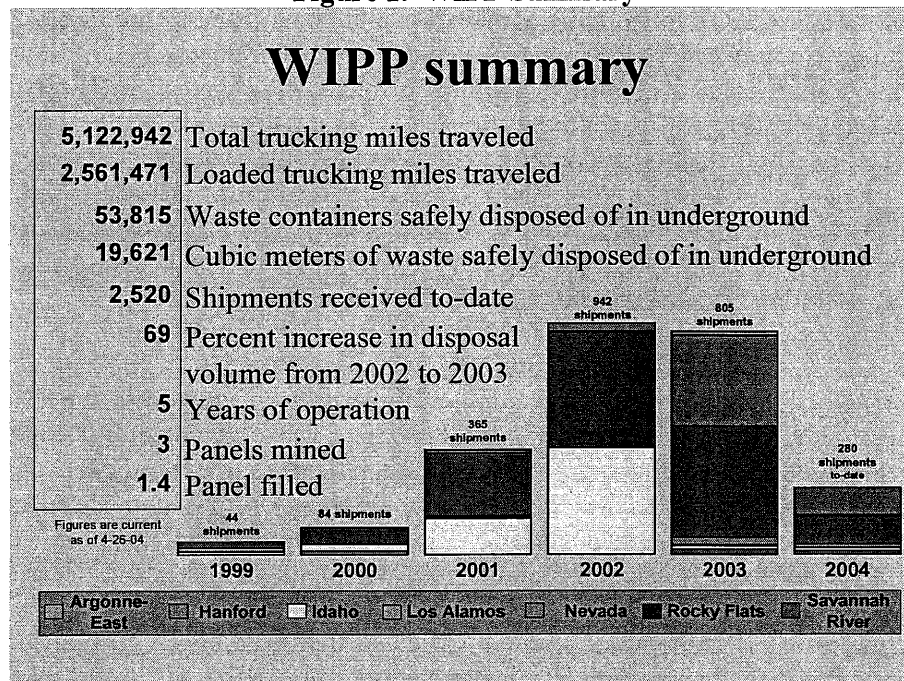
² Those federal sites include: Argonne National Laboratory-East in Illinois, Hanford Site in Washington, Idaho National Engineering and Environmental Laboratory in Idaho (INEEL), Los Alamos National Laboratory (LANL) in New Mexico, Nevada Test Site in Nevada, Rocky Flats Environmental Technology Site (RFETS) in Colorado, and Savannah River Site in Georgia. Shipments from Lawrence Livermore National Laboratory in California are expected to begin during 2004. Inter-site shipments of TRU waste also have been made, including shipments to the Hanford Site from the Energy Technology Engineering Center in California and Batelle Columbus in Ohio and to the INEEL from LANL and RFETS.

³ Another accident occurred in 2002, when a loaded truck veered off the highway, after the driver passed out. The truck finally stopped in an adjacent field. The driver was not seriously injured and no contamination was released. In May 2004, a loaded truck struck a deer. Although the accident caused minimal damage to the truck's front bumper, it did not result in the release of any contamination. Finally, on two occasions, drivers deviated from the designated route.

⁴ The Technical Advisory Group has expanded from seven to twelve states and currently consists of: Arizona, California, Colorado, Idaho, Nebraska, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming.

was to work together toward resolving concerns among themselves and disputes with the DOE during the development and implementation of the transportation safety program. The partnership that was subsequently forged led to the development and implementation of stringent standards, principles, and procedures which have guided and continue to guide every aspect of the transportation safety program, including: inspections, qualifications of drivers, selection of routes, advance notice of shipments, and training provided emergency responders. In addition, this partnership has had other benefits, such as fostering public acceptance to the WIPP transportation effort.

Figure 1. WIPP Summary



Data Source: DOE – Carlsbad Field Office

Unresolved Issues

Despite the effectiveness and success of the transportation safety program during the first five years of WIPP's operational life, open and unresolved issues with the DOE remain. Unless satisfactory and timely solutions are found, future shipments could be affected. These issues include:

- \$ obtaining a permanent commitment from the DOE that sufficient funds to maintain the WGA WIPP Transportation Safety Program will be provided to Western states through WGA for the duration of the shipping campaign;
- \$ completing negotiations with the DOE over security protocols that will help ensure shipments are better protected from terrorist attack;
- \$ successfully negotiating a route for the second set of shipments from the Nevada Test Site to WIPP;
- \$ now that the DOE appears to have determined that a comprehensive WIPP rail safety

- program is not cost effective, appropriately redirecting planning efforts from the development and implementation of a system-wide rail transportation safety program to one that will apply to rail shipments made on a case-by-case basis; and
- \$ ensuring that the shipments do not become “routine” in nature – that attention to detail and compliance with each element of the transportation safety program continues throughout the shipping campaign.

Emerging Issues

In addition to these ongoing concerns, three new issues have emerged that necessitate additional work. They include:

- \$ assessing the effect on the WIPP transportation safety program and identifying issues, if any, of the TRUPACT III shipping container, which, if certified by the Nuclear Regulatory Commission (NRC), as designed, will exceed highway weight limitations;
- \$ ensuring adjustments are identified and implemented so that states are prepared for remote handled TRU waste shipments⁵; and
- \$ strengthening protocols for responding to deviations from the designated route.

The Technical Advisory Group remains optimistic the issues described above can be resolved to the satisfaction of all concerned because the cooperative relationship developed over 15 years of working closely with the DOE has proved to be effective in solving problems.

Lessons Learned

The experience gained in the WIPP transportation safety program is invaluable and has applicability to other radioactive waste shipping campaigns. The DOE has incorporated the protocols developed under this program into transportation plans for other radioactive material campaigns, such as the one in the mid-1990s involving the transport of cesium capsules from commercial irradiation facilities to the Hanford Site. At a minimum, then, this program should serve as a starting point for the design of other shipping campaigns. The lessons learned to date include:

- \$ Collaboration early in the process with all affected states and the DOE is key to solving problems and the collaboration must be substantive and continuous if it is to lead to the development of a successful program.
- \$ As the shipments become more “routine” in nature, officials must be wary of allowing standards to slip.
- \$ Up to three-years lead-time may be needed by affected states to get ready for new routes.
- \$ The dissemination of accurate, timely, and appropriate information throughout the campaign is a critical component of a successful campaign.
- \$ The DOE must “sanction” each agreement made with Western states by incorporating each element into the DOE’s transportation plan and contracts with carriers.

⁵ About four percent of the TRU waste is classified as remote handled (RH). The other 96 percent of the waste is considered contact handled (CH). RH waste contains penetrating forms of radiation, which necessitate additional protective shielding to further protect workers, drivers, and the public. RH and CH waste are more fully described in Section II.

II. BRIEF HISTORY OF WIPP

Since the beginning of the atomic age, federal research and other facilities around the country have accumulated radioactive materials generated from defense activities, but it wasn't until 1974 that federal and local officials were able to agree on a site in southeastern New Mexico for the safe and permanent disposal of some of the waste. Scientists had concluded that the site near Carlsbad with its deep, underground salt deposits looked promising for demonstrating that radioactive material could be permanently disposed without leaks, spills, or other accidents. The rationale behind selecting a site with salt deposits was the view that the salt would naturally collapse around the waste, thereby encasing it, which would prevent the radioactive material from escaping.

For the next 25 years after southeastern New Mexico was selected as the official location for the repository, the federal government spent approximately \$2 billion testing the capabilities of the Carlsbad site, now known as the Waste Isolation Pilot Plant (WIPP), as well as building a facility and a mine located 2,150 feet below the surface. The mine is designed to handle more than six million cubic feet of waste. This is the equivalent of 850,000 55-gallon drums of waste or enough to fill 65 rooms, each the size of a football field. In all, approximately 20,000 shipments of waste will be sent to WIPP for permanent disposal.

The TRU waste buried at WIPP represents decades worth of discarded items, such as gloves, glassware, tools, and rags, as well as sludges and resins that either had been contaminated with plutonium during weapons production and research or generated through cleanup. In addition to this so-called legacy waste, the mine is scheduled to hold yet-to-be generated waste.

TRU waste consists primarily of long-lived alpha-emitting radionuclides, including plutonium. About 96 percent of the total volume of the TRU waste planned for disposal is classified as contact handled (CH). The other four percent is considered remote handled (RH) TRU waste. TRU mixed waste is highly dangerous if inhaled, swallowed or absorbed into the skin. CH containerized waste can be handled safely without heavy lead shielding. RH waste, on the other hand, contains penetrating forms of radiation and must be encased in lead and steel shielding to protect workers, drivers, and the public.

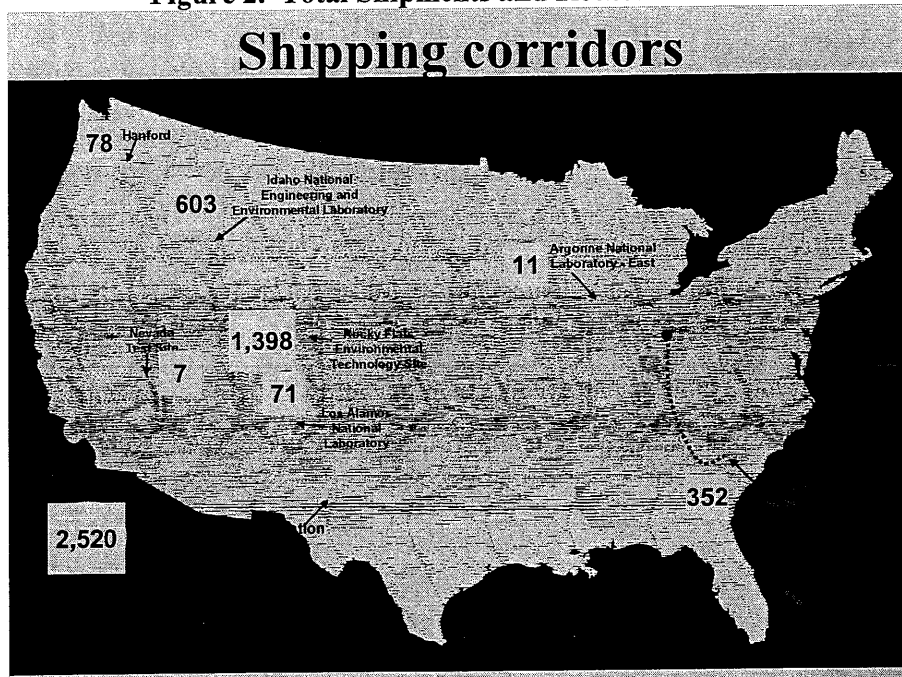
On March 26, 1999⁶ and only after the DOE had received all necessary certifications and permits,⁷ WIPP formally began accepting TRU waste from DOE facilities around the country.

⁶ The first shipment was scheduled to depart from Los Alamos National Laboratory on March 25, 1999, but was delayed for 24 hours due to dense fog in the Santa Fe area. In spite of intense pressure to make the "first" shipment to WIPP, the DOE followed the safety procedures and delayed the shipment until weather conditions improved.

⁷ In 1992, the Congress enacted the WIPP Land Withdrawal Act (P.L.102-579, as amended by P.L.104-201). The Act required the DOE to obtain the Environmental Protection Agency's certification of compliance with all disposal standards before any waste could be transported to WIPP. In addition, the DOE was required to comply with the regulatory authority of the New Mexico Environment Department relating to mixed hazardous and radioactive waste.

During WIPP's 30-year operational life, shipments are scheduled to traverse 30 states and the lands of 11 tribal nations. In the first five years of operation, over 2,500 shipments have arrived safely at WIPP. As Figure 2 reflects, more than half of the shipments have been made from the Rocky Flats Environmental Technology Site near Denver.

Figure 2. Total Shipments and Routes Followed



Data Source: DOE – Carlsbad Field Office

III. MILESTONES AND ACCOMPLISHMENTS OF TRANSPORTATION SAFETY PROGRAM

It was obvious from the beginning to officials from Western states that the public living and working along the proposed routes would not support transport of TRU waste until the public believed appropriate precautions were being developed that would safeguard the shipments. In the late 1980s, states formed a regional group, now known as the WGA WIPP Transportation Technical Advisory Group (Technical Advisory Group), to tackle planning and other transportation related issues. Working together and with the DOE, the Technical Advisory Group developed a comprehensive transportation safety program containing stringent shipping procedures that both Western states and the DOE agreed to follow during the entire campaign. The program is embodied in the WIPP Transportation Safety Program Implementation Guide⁸

⁸ Regional groups have developed their transportation policies and procedures for radioactive materials from the Program Implementation Guide.

(Program Implementation Guide). Even in the earliest drafts, the Program Implementation Guide was designed to serve as a living document subject to periodic review in order to help ensure insights and experience gained during the campaign could be captured and incorporated into the program. Since WIPP's opening, two revisions of the Program Implementation Guide have been made and all changes have been implemented.⁹

The path to developing and implementing a comprehensive transportation safety program for TRU waste shipments that so far has resulted in the safe disposal of nearly 20,000 cubic feet of TRU waste contained many obstacles that, at times, proved difficult to overcome. Many required lengthy negotiations and some are now undergoing further negotiation as new issues have emerged. Despite this, the safety program that has emerged is a model program that works. Its effectiveness is reflected in the following major milestones and accomplishments.

A. 1989 REPORT TO CONGRESS

Beginning in the 1980s, states potentially affected by the DOE's decision to transport TRU waste to WIPP began preparing for the shipments, and in 1988, united to work on common problems. In that year, the WGA received funding from the U.S. Department of Transportation to prepare a report to the Congress on the "opinions, concerns, and priorities for actions" of the seven Western states expected to experience the greatest impact from the initial shipments. These states had formed a task force under the umbrella of the WGA to make recommendations that would enhance the safety of and public confidence in the shipments. The task force, whose efforts culminated in the June 1989 Report to Congress, emphasized that a collaborative, regional approach to planning would be a key step toward developing and implementing a credible accident prevention and safety program for transporting TRU waste. States recognized certain elements of any program developed would vary from state to state. Nonetheless, they were committed to finding ways to make as uniform as possible certain components of a safety program, such as inspection standards, parking requirements, procedures for avoiding bad weather, and other safety controls. States believed uniformity could be accomplished if these elements were built from existing state truck inspection programs, lines of communication, and emergency preparedness training, plans and equipment. In the Report, Western states expressed their willingness to work together and with the DOE to resolve identified problems. Finally, states recognized that their commitment to shoulder responsibility for the shipping campaign would depend on consistent and assured financial support.

B. COOPERATIVE AGREEMENT WITH THE DOE

After the report was issued, the Secretary of Energy agreed that funding Western corridor states would be a necessary component to the development and implementation of a transportation safety program and began to provide funds to Western states through a cooperative agreement

⁹ In April 2004, the Technical Advisory Group began the process of drafting a third revision to the Program Implementation Guide.

entered into with the WGA in late 1989. The vast majority of the funds the WGA has received have been passed through to the states under Service Agreements to carry out identified tasks such as planning, training, and other elements contained in the Program Implementation Guide. The original cooperative agreement (including funding to support the agreement) has been superseded with one that will expire July 1, 2005.

C. 1991 REPORT TO WESTERN GOVERNORS AND SECRETARY OF ENERGY

In preparation for the DOE's then planned test-phase to evaluate the transport safety program, the Technical Advisory Group for WIPP Transport issued a report in 1991 to Western Governors on the status of each of the concerns and recommendations that had been raised in the 1989 Report to Congress. The most important change that had taken place in the two years following the Report was an improved working partnership that had developed between the DOE and Western states that emphasized collaborative problem solving in several areas, including accident prevention, emergency preparedness, and public involvement and information. Ultimately, during this period, collaboration between Western states and the DOE led to agreement on the development of standards, procedures, and protocols on such issues as safety audits of the carrier, independent state inspections, safe parking during bad weather conditions, and radiation detection and protective equipment.

Yet, despite the tremendous effort to reach consensus on all issues, the report identified a major concern of Western states that remained unresolved: obtaining the DOE's explicit commitment to fund the transport safety program of corridor states for the full operational life of WIPP. Permanent funding remains a concern today.

D. WGA POLICY RESOLUTIONS

Since the 1980s, Western Governors have adopted several resolutions relating to the transportation of TRU waste. These resolutions have served to provide policy direction to state officials during negotiations with the DOE on the elements of the transportation safety program as it was being developed and as each element is being implemented today. In September 2003, Western Governors reaffirmed their commitment to the transportation safety program by unanimously adopting Policy Resolution 03-08 (entitled "U.S. Department of Energy Waste Isolation Pilot Plant (WIPP) and Transportation of TRU Waste"). This policy resolution is consistent with previous resolutions in which "the safe and uneventful transport of TRU waste" was recognized as the primary objective of the program. In addition, Governors urged the Secretary of Energy to continue following the procedures and other elements contained in the Program Implementation Guide and to fulfill all commitments made in the 2003 Memorandum of Agreement between Western Governors and the Secretary.

E. WGA WIPP TRANSPORTATION SAFETY PROGRAM IMPLEMENTATION GUIDE

Members of the Technical Advisory Group and the DOE continued to work together after the 1991 Report to Western Governors to reach agreement on outstanding elements of a comprehensive safety program. In addition to building on existing state efforts in such areas as training for emergency responders, the Technical Advisory Group and DOE worked together to develop standards unique to WIPP, such as qualifications for drivers. Ultimately, these combined efforts led to the completion of the Program Implementation Guide. The Program Implementation Guide is the heart of the safety program as it establishes protocols, principles and standards that have guided and will continue to guide all aspects of WIPP's shipping campaign for the next 25 years. The Program Implementation Guide is divided into thirteen sections and calls for:

1. Highly qualified drivers as well as assurances the carriers comply with regulatory and other requirements;
2. State inspections of vehicles at enhanced levels that were developed by the Commercial Vehicle Safety Alliance (CVSA) in cooperation with states and the DOE;
3. Careful monitoring of road and weather conditions so that shipments may avoid adverse conditions that pose a threat to a shipment;
4. Designation of safe parking areas;
5. Advance notice of shipments and en route monitoring through a satellite-based tracking system;
6. Establishment and maintenance of effective emergency medical response capability along the routes;
7. Use of emergency management assistance compacts and mutual aid agreements to ensure a swift response regardless of jurisdiction;
8. Development of effective emergency response plans and procedures for responding to an incident;
9. Acquisition and maintenance of adequate emergency response equipment;
10. Adequate and appropriate training of affected emergency response and medical personnel and the provision of exercises to ensure a coordinated response;
11. Clear communication to the media and public about the risks associated with the campaign and a plan to coordinate and proactively provide information to the news media in the event of a transportation accident or incident;
12. Identification and selection of the safest and most acceptable routes to ship the waste; and

13. Periodic measurement of the effectiveness of the program.

Each element of the Program Implementation Guide has been fully implemented and, in addition, is annually reviewed and revised as necessary to reflect best practices and ongoing needs. As a further quality control measure, the states conduct a comprehensive review of the effectiveness of the entire safety program every other year. The most recent review, which was completed in 2003, concluded the program is working as designed. The effectiveness of the program and, therefore, of the Program Implementation Guide is also reflected in the exemplary safety record of WIPP shipments. Only one minor collision has occurred since WIPP opened.¹⁰

One example of how this remarkable safety record has been achieved is the requirement that enhanced inspection standards be followed for TRU waste shipments. The enhanced inspection procedures as well as inspector training courses had been originally developed by the CVSA for spent fuel shipments, but both states and the DOE voluntarily agreed to apply them to TRU waste shipments. Loaded trucks bound for WIPP are inspected at the point-of-origin using the enhanced standards (known as Level VI) and must be "defect free" before being dispatched to WIPP. In addition, Colorado and New Mexico inspect all WIPP trucks transiting their states using the enhanced inspection criteria. States also conduct periodic en route inspections.

Figure 3. WIPP Shipments: Comparison with Federal Motor Carrier Safety Administration (FMCSA) Data

FMCSA Roadside Inspection Data for the Year 2001*			CVSA Level VI Inspection Data for WIPP Shipments (March 24, 1999 – September 30, 2002)		
Inspection Activity	Number	Percent	Inspection Activity	Number	Percent
Number of Inspections	2,758,008		Number of Inspections	2,970	
With no Violations	749,960	27.2%	With no Violations	2,719	91.5%
With Violations	2,008,048	72.8%	With Violations	251	8.5%

* Data source: FMCSA Motor Carrier Management Information System September 28, 2002 data snapshot (taken from CVSA /DOE Cooperative Agreement Interim Report - Update on WIPP Shipments (April 2004))

Recently, CVSA completed a study of the inspections of shipments made between March 24, 1999 and September 30, 2002. This study shows that while the enhanced inspections have not eliminated all violations (the objective of the inspection component of the transportation safety program), vehicles subject to the Level VI inspection criteria are considered significantly safer than motor carriers not subject to rigorous inspections. (See Figure 3.)

¹⁰ Footnote 3 further describes the accidents and incidents that have occurred since 1999.

Another example of how the safety record has been achieved is the preparedness training that was developed under the Program Implementation Guide. Public concerns associated with transporting radioactive materials often revolve around the consequences of potential accidents. To allay these concerns, Western states and the DOE agreed to work cooperatively to develop a comprehensive training program for radiological emergencies that would be available to all emergency response and medical personnel to ensure they would have the knowledge and skills necessary to protect themselves and the public from hazards associated with TRU waste shipments. This training also would meet requirements imposed under federal law, including regulations of the Occupational Safety and Health Administration. Ultimately, a model program tailored to WIPP shipments was developed. The courses taught under this program are offered several times each year and in various locations to make it easier for emergency response and medical personnel to participate. The provisions of the Program Implementation Guide do not mandate that the specific training developed under the model program be conducted. However, all Western states now take advantage of at least some of the program's components or have developed their own programs, or both.¹¹

In addition to training responders, the Program Implementation Guide encourages the use of tabletop and full scale exercises as a good tool for enhancing learning, testing systems put in place to respond to incidents, increasing awareness, and evaluating training. For most of the past decade, Western states have held two major exercises each year, which have often led to improvements in planning for TRU waste emergencies.

Enhanced inspections and training tailored to WIPP shipments are just two examples of the comprehensive nature of the transportation safety program and the seriousness with which the Technical Advisory Group and DOE took the objective of the Governors in designing a program that would ensure a "safe and uneventful" shipping campaign. The program's effectiveness is clearly evident, as the stringent protocols, principles, and standards developed under the Program Implementation Guide so far have led to the safe delivery of all TRU waste sent to WIPP.

F. MEMORANDA OF AGREEMENT BETWEEN WESTERN GOVERNORS AND THE SECRETARY OF ENERGY

While DOE officials responsible for negotiating the Program Implementation Guide agreed that all its provisions should be implemented and followed throughout the shipping campaign, senior departmental officials never made a commitment that would be binding on the DOE and its staff until 1995, when the Secretary of Energy executed the first Memorandum of Agreement with

¹¹ Training for radiological emergencies has evolved over the years. Currently, the DOE, under the auspices of the Transportation Emergency Preparedness Program, which is responsible for overseeing all training related to DOE shipments, is encouraging states to adopt a comprehensive program called State Training and Education Program (STEP)/Modular Emergency Radiological Response Transportation Training (MERRTT) to meet training requirements. The MERRTT training curriculum has been customized by Idaho (called Idaho MERRTT) in an effort to provide Idaho specific instrument and response training for all radiological accidents or incidents, or both.

Western Governors. A similar commitment to work cooperatively to implement the Program Implementation Guide was again made in February 2003 when the updated version of the Agreement was executed. Under both Agreements, Western Governors and the Secretary reaffirmed "the objective of the U.S. Department of Energy and the Western Governors to be the safe and uneventful transportation of transuranic waste from generator and temporary storage facilities to more suitable treatment, storage and permanent disposal facilities, including the WIPP facility in New Mexico." The Agreement recognizes the regional planning process as the most appropriate mechanism for the "safe and uneventful transportation" of TRU waste and reemphasizes the commitment of Western Governors and the Secretary to supporting this approach for conflict resolution and achieving their objective.

Between execution of the first and second Agreements, the horrific events of September 11, 2001 occurred which fundamentally altered the public's perception of threats to shipments of radioactive materials. The Program Implementation Guide addresses security issues, and a Security Section is being developed to ensure TRU waste shipments are less vulnerable to terrorist attack. The 2003 Agreement reemphasizes the importance of security as both the Governors and Secretary committed to working cooperatively, first, to identify and implement appropriate security procedures, and second, to coordinate security related information exchange, planning, preparedness and response activities.

IV. UNRESOLVED AND NEW AND EMERGING ISSUES

Since WIPP's opening, Western states and the DOE have continued to engage in collaborative problem solving. This approach has worked to resolve countless operational issues. For example, the DOE found that driver minimum requirements were keeping contract carriers from hiring some very qualified drivers. The DOE approached the states and requested a change that would not weaken the qualifications but would allow the carriers to have slightly more flexibility in hiring. After careful consideration, the states agreed and the change was made. The states fully expect that a similar approach involving collaboration, cooperation and consensus building will be instrumental in obtaining satisfactory solutions to the ongoing and newly identified issues described below.

A. UNRESOLVED ISSUES

1. Obtaining adequate funding throughout the campaign. As early as 1989, Western states agreed to shoulder part of the burden created when the federal government decided to traverse their states to dispose of DOE generated waste at WIPP. From the beginning, Western states have struggled to obtain express assurances from the DOE that adequate funding to properly implement all aspects of the transportation safety program would be available during the entire 30 years of WIPP's operational life. While it is true funding has been provided to states to prepare for shipments and otherwise take all the steps necessary to implement the Program Implementation Guide, it is never certain from one year to the next if the amount actually approved will be adequate. This makes it difficult for state officials to plan and prepare for the

subsequent year's shipments. There is also the concern funding for WIPP shipments will not have the same priority in the future as it does today. This concern has recently taken on more urgency as other federal preparedness funding has shifted toward biological and chemical terrorism preparedness in response to the September 11 attacks. Radiological preparedness issues have been sidelined. It is with great persistence that the Western States not only promote an all hazards planning approach but also undertake radiological preparedness training. Western states need assurances from the DOE that funding for the transport of TRU waste will have the same high level of priority throughout the remainder of WIPP's operational life.

2. Completing negotiations with DOE over security protocols. The events of September 11 underscored the possible vulnerability of WIPP shipments to terrorist attack. In the 2003 Memorandum of Agreement, Western Governors and the Secretary of Energy committed to finding ways to reduce the risk. To fulfill this commitment, the Technical Advisory Group established a Security Working Group to work with the DOE on a separate security section to the Program Implementation Guide. The section has been drafted and sent to DOE headquarters for further review. DOE officials have advised the draft requires revisions before it will be approved. It is hoped negotiations will be completed in the near future.

3. Negotiating a route for the second set of shipments from the Nevada Test Site to WIPP. In October 2003, affected Western states and the DOE agreed to the use of State Route 127, located in California, for the first TRU waste shipments from the Nevada Test Site to WIPP. In addition, the DOE committed to finishing the first set of shipments using that route in December 2004. Shipments have begun and as agreed, are scheduled to be completed by the end of the year. However, to complete the removal of TRU waste from the Nevada Test Site, another set of shipments must be scheduled and made. Affected states and the DOE have not reached consensus on the route to be followed for these shipments. Fortunately, it is not necessary to immediately negotiate a route acceptable to all because the DOE does not anticipate the remaining waste will be ready for transport for another two or three years. The DOE has agreed to begin negotiations in the near future to ensure adequate preparations for any new route or routes can be made before shipments begin.

4. Ensuring an appropriate transportation safety program is implemented for rail shipments. In April 2004, the DOE made a preliminary decision not to go forward with a comprehensive program to transport certain TRU waste to WIPP by rail. Instead, the DOE has concluded that it would be more cost effective to transport the waste by truck. Use of rail would continue to be an option, but only on a case-by-case basis. This decision would represent a significant departure from the DOE's previously stated policy that approximately 2,000 TRU waste shipments would be made by rail.

At the DOE's request, the Technical Advisory Group spent more than two years developing a draft program implementation guide for rail as well as a set of expectations states believe should be met if a rail transportation safety program is to be successful in promoting safe and uneventful transportation of TRU waste. Rather than start from scratch, Western states opted to adapt the truck Program Implementation Guide. This is primarily because states believe the stringent safety protocols and other measures required for truck shipments are the reason the truck

shipping campaign has been so effective. This view is also consistent with the policy resolution Western Governors adopted in 2003 that rail shipments follow “standards, procedures, and protocols comparable to those used for shipments of TRU waste by truck”. The rail guide, which was developed with very limited input from the DOE, has undergone several revisions and the latest draft has been made available to the DOE for its review. If the DOE’s preliminary decision to forego rail shipments becomes final, Western states are concerned the DOE will not give the same care and attention to developing a program for rail shipments made on a case-by-case basis that would have been given to a comprehensive rail transport program. Western states and the DOE need to work together, using collaborative problem solving, to ensure appropriate planning for rail shipments is conducted so that the policy objective of the Western Governors will be met.

5. Maintaining high standards as the campaign becomes more “routine”. In articulating “safe and uneventful” shipments of TRU waste as the primary objective for shipments of TRU waste, Western Governors deliberately set the bar high for the development of the transportation safety program. They believed this was necessary not only to ensure the safety of the shipments, but also to overcome public resistance. As the program was being built, Western states pushed for and ultimately succeeded in obtaining the DOE’s approval to design a transportation safety program containing stringent standards in such areas as driver qualifications, inspections, and satellite tracking of the shipments. These were touted to the public as proof the shipments would be safe. And, as the record to date clearly shows, the standards put in place have succeeded in producing a safe campaign. However, there is a fear that as the shipments become more “routine” standards will slip which, in turn could make the shipments more prone to accidents or other incidents. Public confidence in the program also could slip. There have already been a few occasions where procedures have not been completely followed. For example, required weather checks have not always been as thorough as they should be and drivers sometimes fail to send required notifications when they are making a routine stop. Western states and the DOE must both remain diligent in holding public officials and their contractors accountable for operating the program as it was designed.

B. NEW AND EMERGING ISSUES

1. Assessing how the TRUPACT III container, if approved by the NRC, will impact the WIPP transportation safety program and making any needed adjustments. The DOE has submitted an application to the NRC to approve a new shipping container called TRUPACT III. When fully loaded with TRU waste, the container, as designed, will weigh approximately 66,000 pounds. The tractor and trailer hauling the TRU waste together weigh about 23,000 pounds. This means that when a truck is fully loaded, its total weight will exceed standard highway weight limits of 80,000 pounds, which may require a special overweight permit to be obtained before the shipment is to be dispatched. In addition, bridges located on the designated routes for WIPP shipments in certain states may not be able to accommodate extra heavy loads. Alternate routes could be needed. To ensure there is no disruption of shipments, assuming the NRC approves the TRUPACT III as an acceptable container for TRU waste, Western states and the DOE need to work together to assess the impact the TRUPACT III container will have on the transportation

safety program. If the assessment reveals that existing provisions of the Program Implementation Guide need to be amended, the Technical Advisory Group and DOE should collaborate on making the appropriate changes to the DOE WIPP Transportation Plan and the Program Implementation Guide.

2. Ensuring adjustments are made to the transportation safety program for remote handled (RH) TRU waste. In March 2004, the U.S. Environmental Protection Agency issued its final decision approving the DOE's RH TRU waste characterization plan. This decision does not mean that the DOE may immediately begin shipments of RH TRU waste to WIPP as other approvals from both the Environmental Protection Agency and New Mexico Environment Department are needed. However, the decision suggests that RH shipments could begin as early as 2006. As such, Western states and the DOE should undertake a joint review of all aspects of the transportation safety program so they may take the steps necessary to ensure states are prepared when shipments actually commence. This may include making adjustments to training offered to inspectors and emergency medical and other responders.

3. Ensuring protocols relating to deviations to the designated route are followed. In early April 2004, a loaded truck deviated from the designated WIPP route, but the deviation was not reported until the driver had traveled approximately 52 miles. The preliminary investigation conducted after this incident revealed relevant protocols contained in the Program Implementation Guide were not followed and existing protocols may need to be strengthened. At its April 2004 meeting, the Technical Advisory Group agreed to review the relevant sections and make appropriate revisions. After the DOE has approved the final draft, Western states will take all steps necessary to immediately implement agreed upon changes. In the interim, Western states and the DOE have agreed to reemphasize the necessity of following all existing protocols and to hold those accountable who do not. Western states hope changes made to the route deviation protocols are implemented by the end of 2004.

V. LESSONS LEARNED

After almost fifteen years of working together, the Technical Advisory Group believes the WGA WIPP Transportation Safety Program can offer five practices or approaches that should be of value to other radioactive material shipping campaigns. When they were adopted, these practices seemed innovative and at times, problematic or even unnecessary, but now with five years of safe deliveries to WIPP, they are considered indispensable to a successful campaign.

- **Collaborative problem solving is fundamental.** The single most important characteristic of the transportation safety program is collaborative problem solving among Western states and with the DOE. Western states recognized more than ten years before WIPP actually opened they needed to work together if they were ever to reach consensus on common concerns. As a first step, Western states formed a regional group – the Technical Advisory Group – to work on common problems. This cooperation and collaboration eventually led to agreements on thorny issues, which in turn meant less dissension when agreed upon solutions

were presented to the DOE for its consideration. To the DOE's credit, agency officials also recognized that a divisive relationship was counterproductive and by 1990, were more receptive to working collaboratively with state officials as a way to reach consensus on common issues. Ultimately, collaboration became embedded in all aspects of the design of the shipping campaign and fundamental to the development of the components of the transportation safety program that are being followed today. Most important, collaboration did not end either with the completion of the Program Implementation Guide or the opening of WIPP, and it is not likely to in the future. This is because Western states believe collaboration that is continuous and substantive will lead to consensus, and is the key to ensuring the public will be protected from harm throughout the remaining 25 years of the campaign.

- **Standards must be kept high as the campaign becomes more "routine".** Another critical component of the transportation safety program is the need to maintain high standards throughout the shipping campaign. As discussed above in the section on unresolved issues, Western Governors set the bar high for the development of the WIPP transportation safety program to ensure the safety of all TRU waste shipments and to foster public acceptance of these shipments. Ultimately, a program containing stringent standards was designed and implemented. In the five years since WIPP opened, Western states have learned the value of maintaining high standards, but operating the program as designed requires sustained vigilance on the part of both Western States and the DOE.
- **Up to three-years lead-time may be needed to prepare for new routes.** Gaining public acceptance to shipments of TRU waste along an identified route is difficult, time consuming and only possible when the public believes all steps necessary to ensure the highest standards for incident prevention and emergency preparedness have been taken. Doing this requires the completion of dozens of tasks, such as making assessments of equipment and training needs, providing consistent and respectful outreach to members of the public and elected officials, and training emergency response and medical personnel, inspectors and dispatchers on how to handle an accident, including any release of radioactive material. And, no step can be taken without careful planning. WIPP's history demonstrates that up to three years may be needed to prepare a new route for shipments. If the appropriate amount of time is not taken, a state runs the risk of invoking public resistance to the proposed shipping campaign that could be difficult to overcome or worse, runs the unacceptable risk of the state being unprepared for an accident once the campaign starts.
- **Dissemination of accurate, timely, and appropriate information is critical.** One of the important lessons of the transportation safety program is the continuing need for up-to-date and reliable information on all shipments so that both state and federal officials have the resources in place to prepare for the departure of loaded trucks and to respond to any incidents or accidents that may occur en route. Maintaining public trust and confidence in the campaign depends on the appropriate resources being available during each shipment. This means states need accurate information not only on the location of a loaded truck, but when shipments are scheduled to depart. Early in the development of the transportation safety

program, Western states and the DOE recognized the importance of a tracking and communication system for shipments of TRU waste. Considerable time and funds were expended developing a system, known as TRANSCOM, to provide nearly real-time data to state and federal officials on the whereabouts of each shipment. While the system was initially unreliable, all now agree TRANSCOM is working well. However, ensuring that TRANSCOM continues to succeed in properly monitoring shipments depends first, on providing training to personnel using the system so that they have the knowledge necessary to recognize when a problem has occurred and how to respond, and second on maintaining and upgrading the system on a regular basis. Constant oversight and diligence on the part of Western states and the DOE are also required.

Accurate and timely advance notice information on the departure of a shipment is as important as the need for reliable information on the whereabouts of a shipment en route to WIPP. Departure information is developed from input received from the DOE's generator sites, which is subject to many variables such as the availability of shipping casks and can change on a daily basis. As a result, departure schedules must often be altered. This causes confusion and runs the risk of a state not having the proper resources available for inspections, responding to incidents, or both. Due diligence on the part of the DOE is required to help ensure departure schedules are as accurate as possible when they are made available to the states and changes are rare.

- **DOE must "sanction" all agreements made with Western states.** Early in the shipping campaign, Western states discovered that DOE carriers or DOE personnel working at the generator sites were not following certain specific protocols and procedures contained in the Program Implementation Guide. The reason is that the protocols and procedures had not been incorporated into the transportation plan being used by DOE personnel or into the contracts entered into with carriers. To remedy this problem, the DOE agreed to revise its transportation plan and contracts with carriers to accurately reflect all agreements made with Western states. Periodic reviews of the transportation plan and contracts are needed to ensure the DOE continues to "sanction" agreements made with Western states.

VI. CONCLUSION

Thirteen years have elapsed since the Technical Advisory Group last provided a written report to Western Governors on the status of planning for TRU waste shipments; although, every state's representative has maintained contact with their Governor's Office during the development of their state's program as well as the larger regional program. During that time, WIPP opened and more than 2,500 shipments of TRU waste safely arrived for permanent disposal at the facility. This record of success is a direct result of the comprehensive transportation safety program that Western states and the DOE jointly designed and implemented. Yet, development of this program would never have been possible if both sides had not concluded early on that collaboration with each other was critical to reaching consensus and resolving disputes. The positive relationship that exists today is a strong one that should help in finding acceptable

solutions to both ongoing and newly identified issues as well as any future issues that may emerge during the remaining 25 years of the campaign.

The WIPP Transportation Safety Program embodied in the Program Implementation Guide is now considered a model program that has gained public confidence and acceptance for the transport of TRU waste to WIPP. Western states don't anticipate any erosion in the public's support as long as the stringent standards and other elements contained in the Program Implementation Guide are followed. The enviable safety record to date suggests that the standards have been adhered to and with diligence on the part of both states and the DOE, should continue to be followed in the future. For Western states, this will not be a problem, as they firmly believe the entire transportation safety program is worthy of defending.



**Western
Governors'
Association**

Radioactive Waste Program

WGA Policy Resolutions

Reports/Manuals

Documents Related to Rail Shipment Process

Other Documents

News Updates

Documents Related to Spent Fuel

Related Sites

State, federal and private
sites related to
radioactive waste

WGA Contact

William B. Mackie

The objective of the Western Governors' Association Radioactive Waste Program is the safe and uneventful transport of waste from temporary storage facilities to more suitable treatment and storage facilities.

Western Governors recognize development of a successful transportation program requires cooperation among the western states, the U.S.

Departments of Energy and Transportation, and any private shippers of radioactive waste. A transportation safety and information program similar to that developed between the western states and the U.S.

Department of Energy for the shipment of transuranic waste to the Waste Isolation Pilot Plant should be utilized for all route-controlled and special radioactive waste shipping campaigns.

A transportation safety program must focus on the states' prominent role in the areas of planning, evaluating routes, ensuring shipment vehicle and driver safety, preventing accidents, preparing emergency and medical response teams, and informing the public. Early coordination and effective communications by all potential shippers with state, tribal, and local governments is essential to the ultimate success of any radioactive waste transportation safety program.

WGA Policy Resolutions

Private Storage of Commercial Spent Nuclear Fuel
(2003)

U.S. Department of Energy Waste Isolation Pilot
Plant (WIPP) and TRU Waste (2003)

Transportation of Spent Nuclear Fuel and High-
Level Radioactive Waste (2002)

DOE Cleanup Program Top-to-Bottom Review
(2002)

Assessing the Risks of Terrorism and Sabotage
Against High-Level Nuclear Waste Shipments to a
Geologic Repository or Interim Storage Facility
(2004)

Reports/Manuals/Presentations

Report to Western Governors on the Status of the
WIPP Transportation Safety Program (June 2004)

Low-Level Radioactive Waste: Disposal Availability
Adequate in the Short Term, but Oversight Needed
to Identify Any Future Shortfalls. GAO, June 9,
2004.

News Updates

- July 9, 2004
- July 4, 2004
- June 25, 2004
- June 18, 2004
- June 11, 2004
- June 4, 2004
- May 28, 2004
- May 14, 2004
- May 7, 2004

Rail Process

WGA Rail Expectations (December 2003)

WIPP Rail Program Implementation Guide (July
2004)

- Railcar Preventive Maintenance
Procedures

Highlights

National Research Council Presentation "Improving the Characterization Program for Contact-Handled Transuranic Waste Bound for the waste Isolation Pilot Plant" (January 15, 2004)

WGA-WIPP Transportation Program Implementation Guide (December 2003)

Western States Committed to Radioactive Waste Transport Safety - Fact Sheet (2001)

Radioactive Material Transportation Manual -- Department of Energy

Rail Primer -- Western Interstate Energy Board

Matrix listing regulations for RAM transportation for highway and rail modes of transportation -- TEC/WG

Other Documents

Memorandum Of Agreement Between The Western States and The Department of Energy (2003)

WIPP Land Withdrawal Act

WGA WIPP white paper (2003)

Assistant Secretary Robersons testimony to Subcommittee on Strategic Forces, Senate Committee on Armed Forces (2/25/04)

Spent Fuel

DOE Spent Fuel Supplementary Analysis Memo (3/10/04)

Policy on spent fuel transportation -- Nuclear Energy Institute

Nuclear Waste Policy Act

- Rail Pig Bad Weather Procedures
- Railcar Inspection Checklist for WIPP Shipments
- Safety Elements in the WIPP Rail Transportation Contract
- Training and Exercise Resources

White Paper on Application of FRA SCOP for Rail Shipments to WIPP

White Paper on Advantages of Dedicated Train Service for Rail Shipments to WIPP

White Paper on Advantages of WIPP Rail Transportation

Statement on dedicated trains for Spent Nuclear Fuel shipments -- American Association of Railroads

Safety Compliance Oversight Plan -- Federal Rail Administration

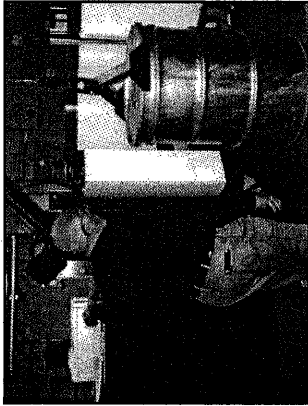
"A Study of Hazards and Risks to Public Health and Safety, the Environment, and the Economy Associated with the Transportation of Hazardous Materials" -- US Department of Transportation RSPA

(See p. 13, RAM shipments; p. 17, Spent Fuel Transportation Risk; p. 18, Security; p. 26, Rail routing and the FRA SCOP; and p. 34, Rail Infrastructure)

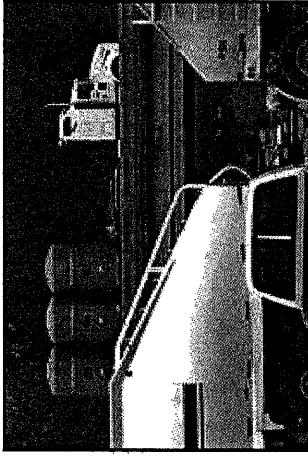
Transportation Safety WIPP-PIG Rail Comparison -- TEC/WG

Rail Safety and Security: Some Actions Already Taken to Enhance Rail Security, but Risk-Based Plan Needed. GAO-03-435, April 30. Highlights

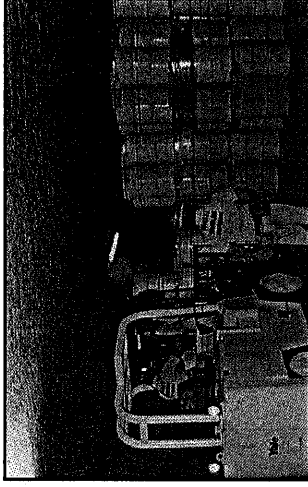
July 13, 2004



Characterization



Transportation



Disposal

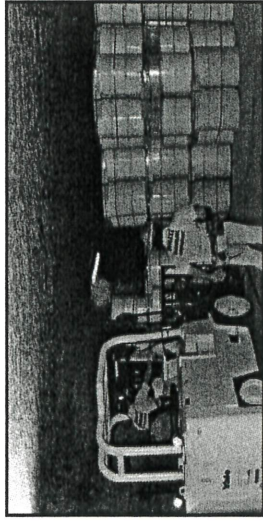
WIPP Update (Status and Plans)



**Carlsbad Field Office
U.S. Department of Energy**

July 20, 2004

Disposal Totals by Site



WIPP Receipt Totals as of : 19-Jul-04			
Site	Shipments	TPs	Volume
ANL-E	14	36	120.78
HANF	102	256	661.08
INEEL	624	1344	3711.4
LANL	71	202	598.1
NTS	7	21	61.74
RFETS	1566	3874	11770.8
SRS	410	1229	5241.52
Grand Total:	2794	6962	22165.4

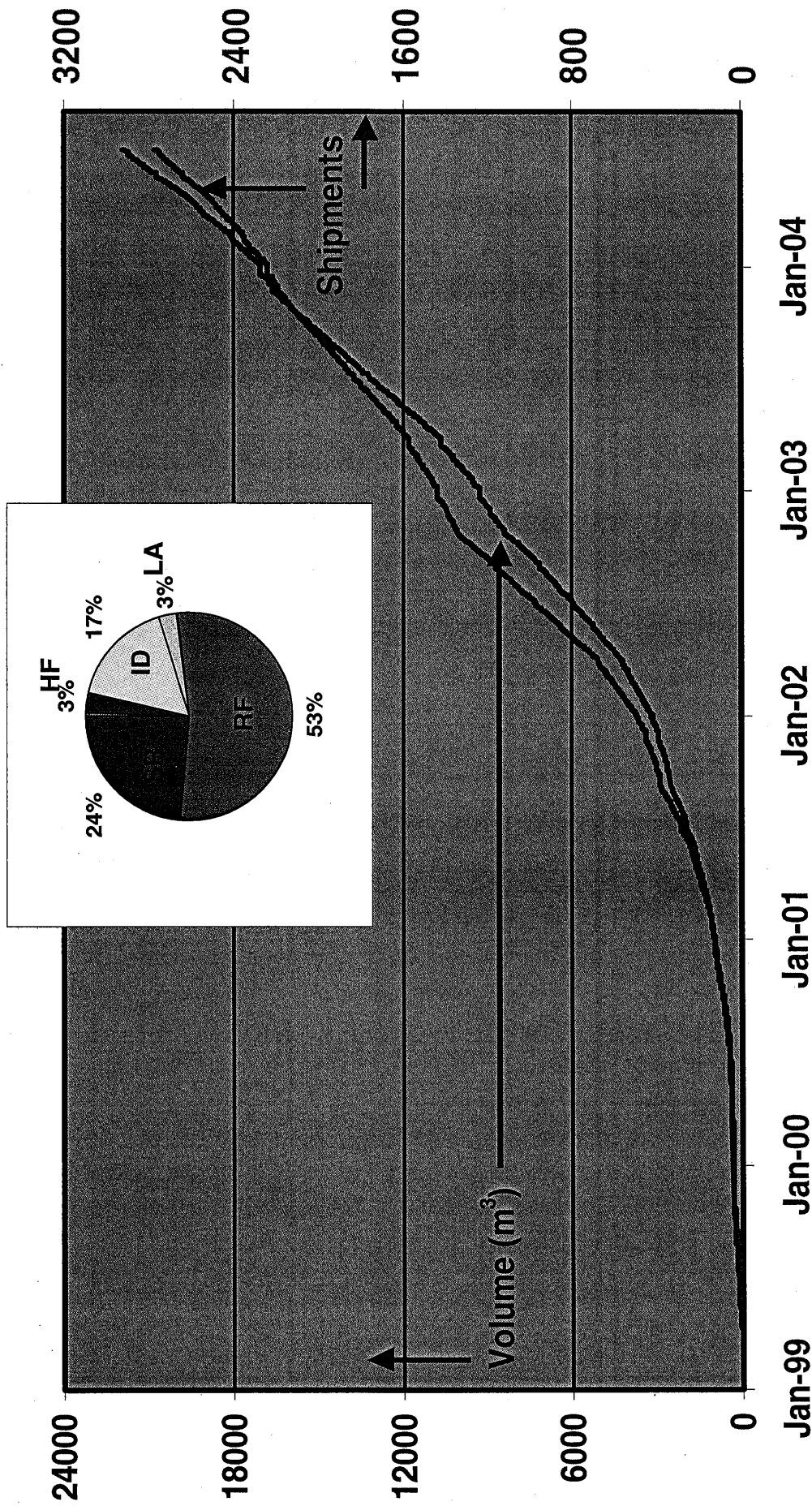
Finish

on hold

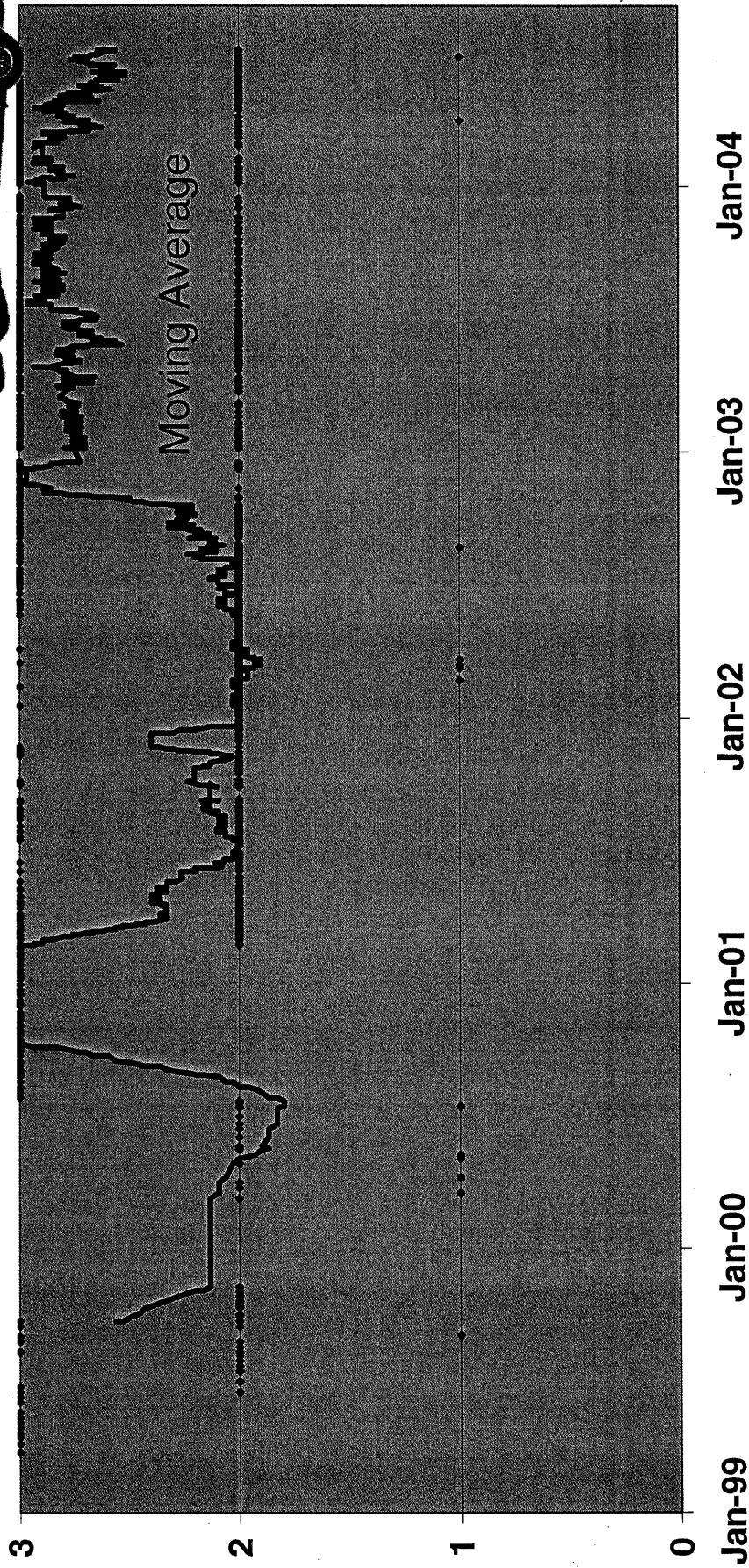
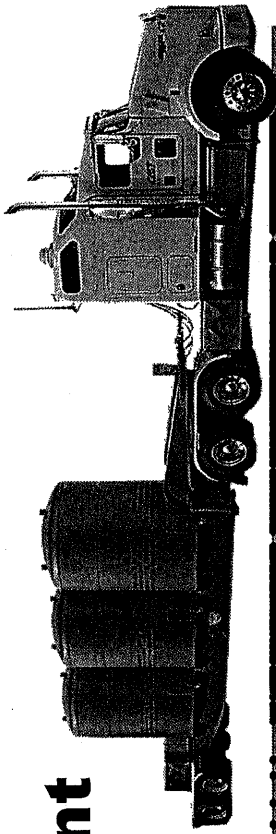
on hold

Finish Shipments April 05

Cumulative Totals to WIPP



TRUPACT-IIs per Shipment



PANEL 2



**Panel 3 complete – 12/13/04 - Construction Certification
Filing planned for January → NMED inspection**

Audit Status

Final Audit Reports @ NMED

		<u>sent</u>	
INEEL	A-04-17	6/30/04	Lab Recert.
-RFETS	-A-04-10	-4/29/04	-Recert.
-NTS/CCP	-A-04-04	-1/14/04	-Recert.
-ANL-E/CCP	-A-04-03	-1/12/04	-Recert.
Hanford	A-04-06	1/8/04	Solids Cert.
RL/CCP	A-04-07	12/12/03	HSG Cert.
-LANL	-A-03-27	-12/12/03	-Recert.
RL/CCP	A-03-25	12/2/03	Cert.
-SRS/CCP	-A-04-01	-1/12/03	-Recert.
RFETS	A-04-08	11/7/03	Soil Repack
ANL-E	A-03-26	10/8/03	Solids
LANL	A-03-24	9/2/03	HSGas

Upcoming Site Assessment Schedule

NTS/CCP	Redeploy Surv. S-04-11	August 3 - 4, 2004
AMWTP	Recert Audit A-04-22	August 16 - 20, 2004
Hanf/CCP	Recert Audit A-04-20	September 13 - 17, 2004

Near Term (~week) Submittals:

LANL/CCP	A-04-05	Initial Cert.
LLNL/CCP	A-04-25	Initial Cert.

Turning Shipments Around

June 9, 2004 Savannah River Site shipment # SR040127

Stopped on June 9, 2004, near Pecos, TX, enroute to WIPP and returned to SRS. While enroute, SRS/CCP notified CBFO of a suspected prohibited item in one of the drums on that shipment. At SRS, the waste container was opened. Visual examination showed that there were no prohibited items inside the drum.

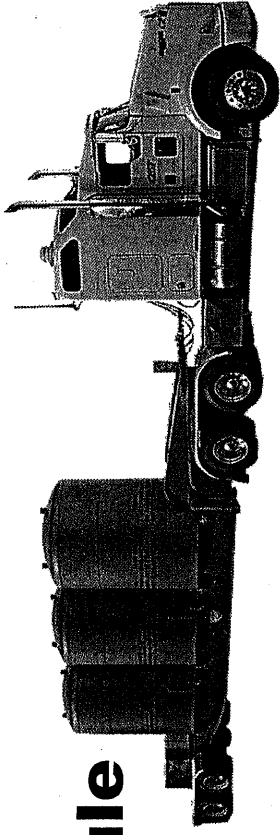
July 14, 2004 INEEL shipment # IN040030

Stopped on July 14, 2004, near Trinidad, CO, enroute to WIPP and returned to INEEL. While enroute to WIPP, CBFO determined that some drums were not in an approved lot from waste stream 218, thereby skewing the sampling ratio and introducing uncertainty in knowledge of the presence and concentrations of hazardous materials in the added drums. CBFO also identified an identical problem with lot 1 of waste stream 216 from INEEL. It appears there are 103 containers in the underground that should not have been added to the approved lots for these waste streams.

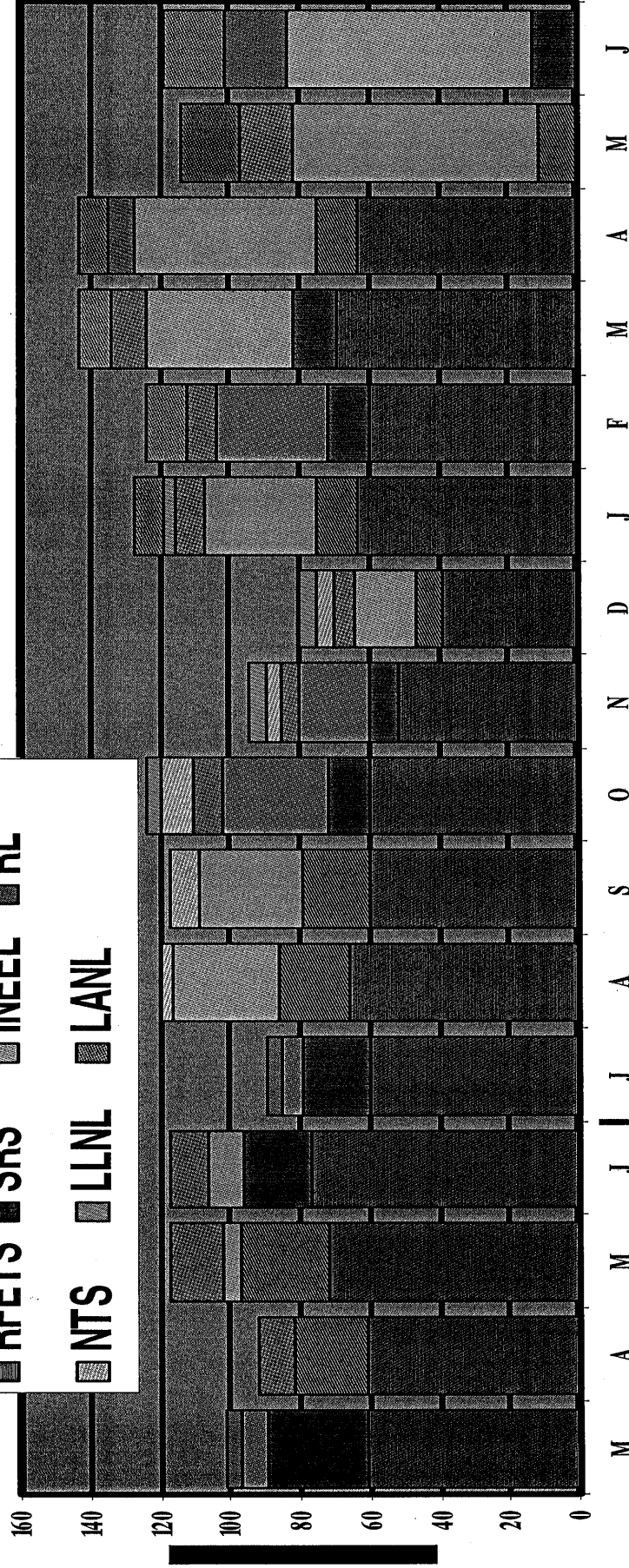
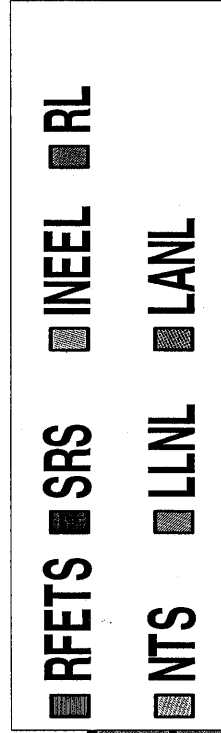
DOE:

- | | |
|---|---|
| <p>There is little or no risk of health and safety consequences</p> | <ul style="list-style-type: none">- Identified the compliance issue- Took immediate corrective action- Made all notifications- Immediately initiated corrective action |
|---|---|

Estimated Shipping Schedule



Shipments per Month



Actuals → Projected

* Not EM-1 Baseline

NTS Redeployment of CCP and Shipping Plans

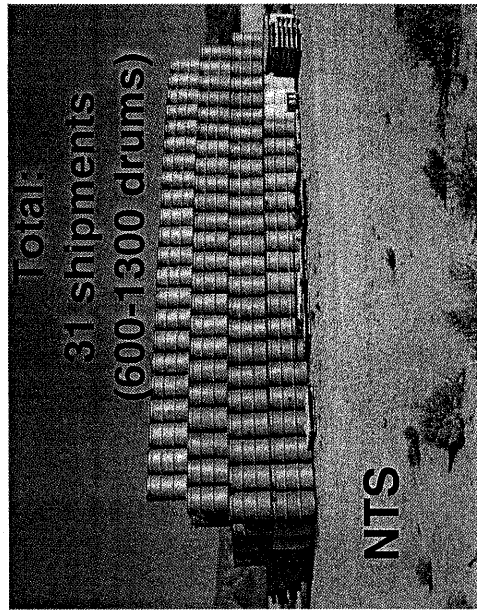
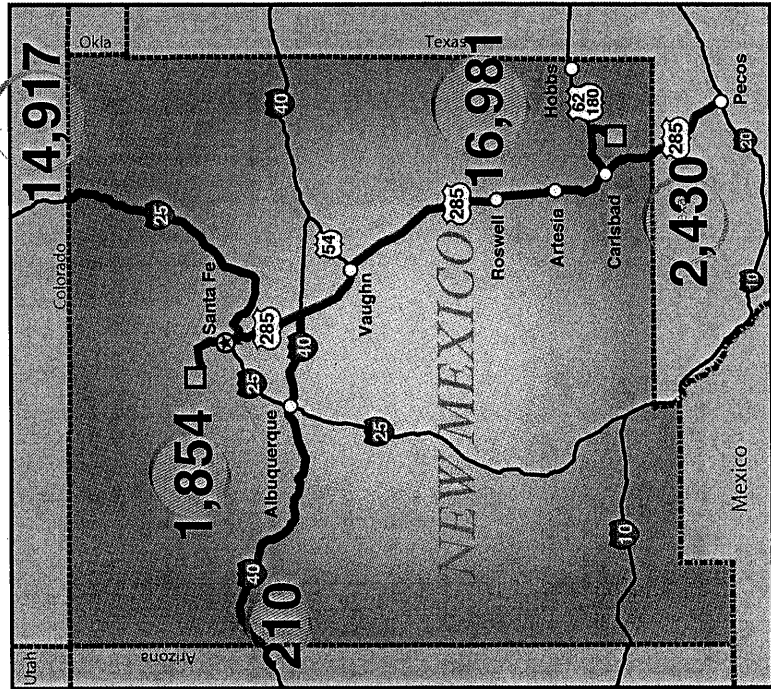
Remaining waste drum inventory from FY03 characterization

NDA	183
RTR	277
HSGas	83*

* all have "holds" (NCR) due to suspected prohibited items, NDA questions, etc.

	NTS	LLNL
August	4	
September	8	
October	10	4
November	4	5
December	5	5
January		4
Total:	31	18

Redeployment Surveillance: August 3-4



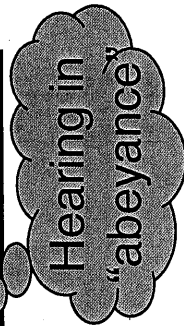


Permit Modification Status - Summary

Class 2	Class 3
New transfer vehicle: - Approved May 07, 2004	Remote Handled waste
Packaging-specific DAC - Approved May 07, 2004	Panel closure redesign
	Add Panels 4-10 (HWDUs)
	Container management improvements
	Section 311 mandated confirmation changes
Procedure for Consideration of Tank Waste - July 2, 2004 ←	NMED agency-initiated PMR to limit allowable waste streams

“older”

“recent”





“Older” Class 3 PMR Status

1. Panel 4-10 HWDU - May 13, 2003 – Administrative Completeness granted August 14, 2003 – NMED issuance of draft permit for public comment pending (433 days)
2. RH TRU Waste – June 28, 2002 – March 2003 NOD – May 2003 re-submittal - Second NOD was to be issued by October 2003 (752 days)
3. Panel Closure Redesign – October 7, 2002 – NMED deferred action to coordinate with EPA after re-certification (~November 2004)

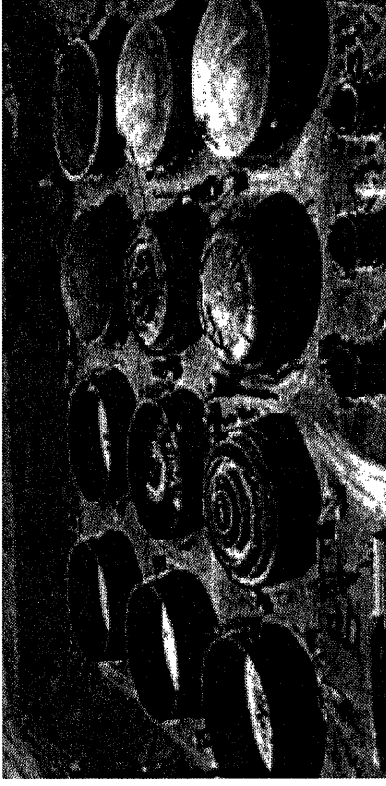


“Recent” Class 3 PMR Submittals

1. New WAP – Section 311 compliance – PMR submitted Jan. 9, 2004
 - Would limit waste confirmation requirements to RTR and VE
 - Would confirm VOC safety by sampling and analysis of VOC levels in the underground
2. Container Management Improvements – PMR submitted Jan. 7, 2004 – Public meetings Feb. 17 & 19 (for 1. and 2.)
 - Would increase above-ground storage
 - Would allow use of large containers (TRUPACT-III + SLB)
 - Would make requirements based on NRC certification
3. NMED Agency-Initiated PMR to limit allowable waste streams
 - Hearing June 2, 2004, was postponed to allow Permittees to submit a PMR in settlement of the issue (July 2, 2004)

Procedure for Consideration of Tank Waste

Submitted July 2, 2004 as Class 2 PMR



NMED Hearing Officer Order granting a Joint Motion filed by NMED and the Permittees seeking to hold the hearing in abeyance:

“NMED and Permittees to hold this proceeding in abeyance, pending decision on a permit modification request that the Permittees intend to file.If the permit modification request is approved by NMED, after appropriate public comment and participation, NMED will withdraw its permit modification in this proceeding

DOE’s July 2 PMR provides a new permit condition that establishes:

“procedure for consideration of TRU mixed waste from tanks that has ever been managed as high level waste by prohibiting the acceptance and disposal at WIPP of TRU mixed waste from tanks ... unless the waste has been approved through a subsequent Class 3 permit modification.”



Compliance Re-certification Application Status

- Secretary Abraham transmitted CRA to EPA March 26, 2004 - EPA will evaluate the completeness pursuant to 40 CFR 194.11 before processing
- EPA provided a letter to DOE asking for additional information and several references on May 20, 2004. DOE will respond to this request in three letter submittals to EPA planned for July, August and September.
- EPA indicates potential for 1-2 more requests - DOE will respond as quickly as possible.
- EPA will hold public meetings in New Mexico the → week of July 26th
- EPA indicates it may determine completeness of the application by the end of calendar year 2004
- EPA is required by the LWA to issue a recertification determination in 6 months
- Recertification is expected 12 to 15 months after CRA submittal

DATE: July 26, 2004

LOCATION: PRVCC

Carlsbad, NM

TIME: 6:00pm - 9:00pm

DATE: July 27 & 28, 2004

LOCATION: Marriott Pyramid North

Albuquerque, NM

TIME: 6:00pm - 9:00pm (July 27)

1:00pm - 4:00pm (July 28)

DATE: July 29, 2004

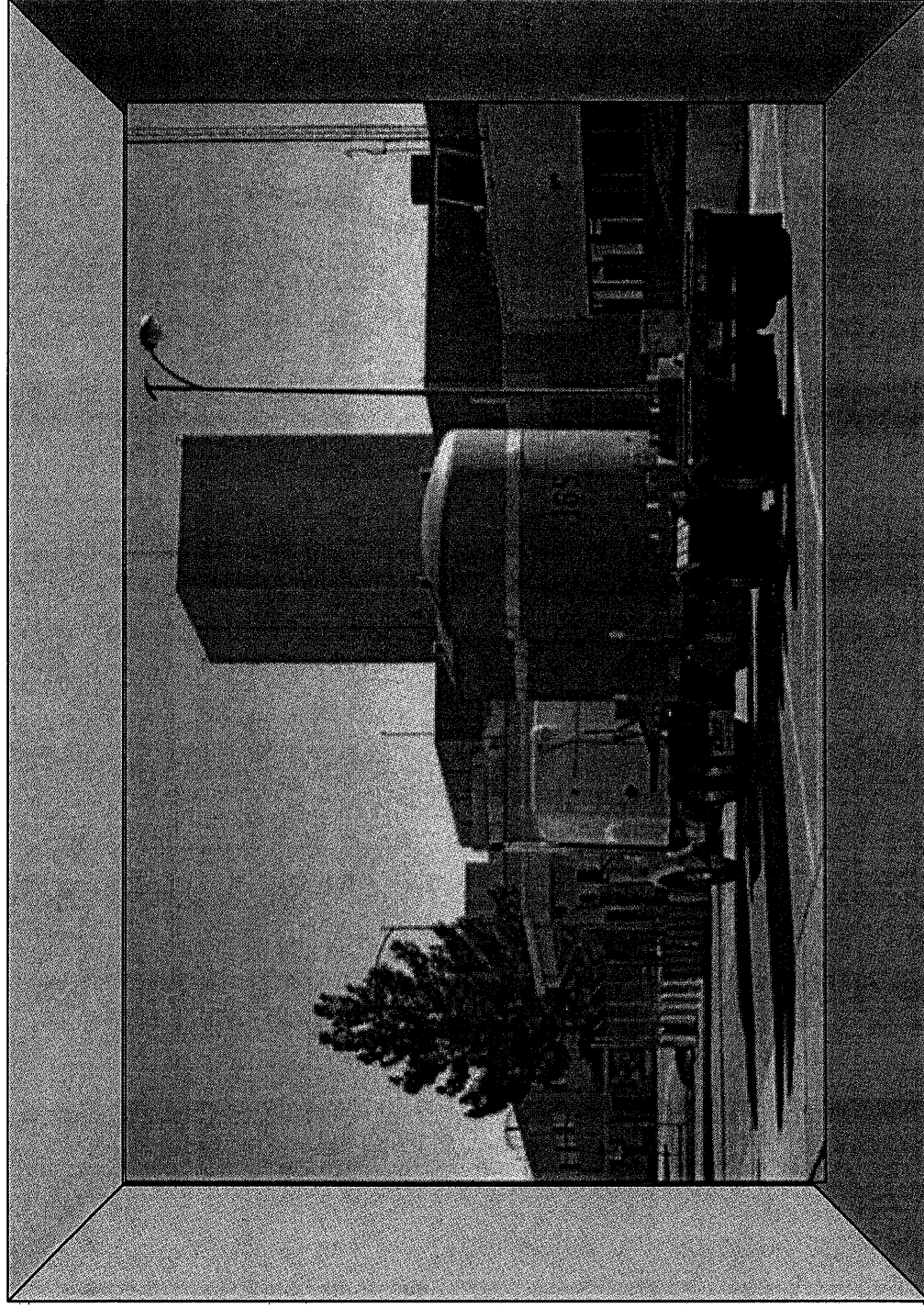
LOCATION: Santa Fe Hilton

Santa Fe, NM

TIME: 1:00pm - 4:00pm; 6:00pm

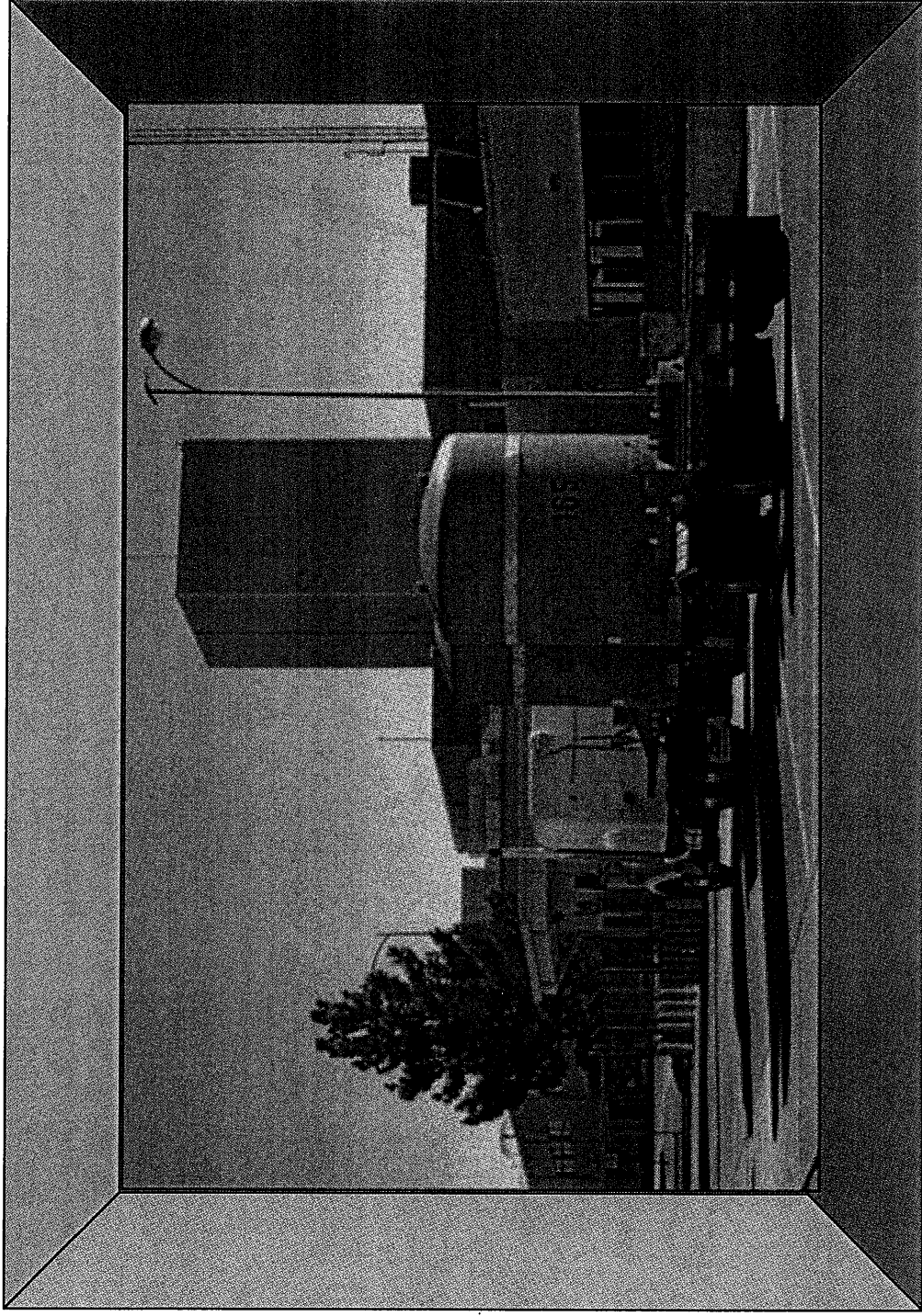
- 9:00pm

Questions & Answers



July 20, 2004

Questions & Answers...



July 20, 2004

Answers to NMED Questions



1. CBFO reorganization
2. CRA Status*
3. Centralized Confirmation Facility Status
4. Status of NMED DOE Oversight Office in Carlsbad
5. Sen. Domenici's legislation (S.2403 DOE National Security Act for FY2005) to provide competitive contract for independent WIPP oversight
6. Refurbishing the northern experimental area for research activities
7. Performance metrics on the web site
8. Resumption of shipments from NTS*
9. Waste hoist failure event and lessons learned
10. Update on salt pile construction activities
11. Domestic sewage release at WIPP - June 3, 2004
12. Status of citizen lawsuit against DOE, WTS, and CAST
13. Recent Records of Decision with impact on WIPP
14. Permit Modification Request for consideration of tank waste that was ever managed as high-level waste*

Status of CBFO reorganization

Carlsbad Field Office

Office of the Manager
Manager (Detwiler- Acting) Dep. Manager (Piper) Chief Scientist (Nelson) STA (Authorization Basis)(Wu) Chief Counsel (Vacant) Attorney Advisor (Rose) Secretary

Assistant Manager for Operations
Assistant Manager* (Vacant) (Piper Acting) Mine Operations Advisor* Env Compliance Policy Specialist* Compliance Certification Mgr* NEPA Compliance Manager* RCRA Program Manager* Secretary Office Automation Assistant *Operations Integration Team

Office of Business
Office Director (Huckeba- Acting) • QA Manager • Senior QA Specialists • Senior QA Specialist • QA Specialist • Planning and Budget Work Coordinator • Program Analyst • Budget Analyst • Contracts Manager • Senior Contracts Specialist • Contract Specialist • Admin. Specialist (Contracts) • Admin. Specialist (HR) • Chief Information Officer • Public Affairs Officer • Secretary

Office of Disposal	Office of Characterization and Transportation
Office Director* (Basabilvazo) • Safety Officer (Farrell) • Facility Representative (Galbraith) • Facility Systems Engineer • Waste Operations Program Manager • Security and Emerg. Ops. Program Manager • Physical Scientist • General Engineer • Physical Scientist	Office Director* (Watson) • TRU Waste Cert. Work Coordinator (Knerr) • CH TRU Certification Manager • RH TRU Certification Manager • Transportation Certification Specialist • TRU Waste Logistics Work Coordinator (Gadbury) • TRU Waste Planning Mgr. • Transportation Packaging Manager • Institutional Affairs Manager • Charact. & Trans. Technology Specialist

Centralized Confirmation Facility Status

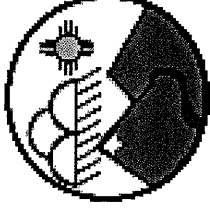
“NMED has seen a Q&A document by Rep. Heaton promoting the establishment of a CCF at WIPP”

DOE recognizes:

- ☐ **Economic benefit of CCF operations at WIPP for SE New Mexico
 - **Motivates community leaders to support****
- ☐ **CCF at WIPP is cost effective (cost avoidance at small sites)
 - **CCF concept has a finite lifetime****
- ☐ **CCF Approval will require Class 3 PMR
 - **NMED currently is considering five (5) Class 3 Requests****

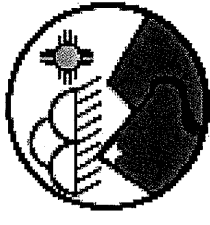
Status of NMED WIPP Program Office in Carlsbad

- Funded via “Agreement in Principle” established between NMED and DOE. Similar NMED offices at LANL and Sandia and there was one at WIPP from 1995-96.
- Scope of Work negotiated and approved (both NMED and DOE)
 - up to 3 Scientists
 - 1 engineer
 - 2 clerical workers, and
 - 1 technical manager
- \$600K for FY2004; funds [have been/will soon be] available
- FY05 Yearly “Work Plan” approved
- NMED intends to add additional personnel for other NMED oversight initiatives in SE New Mexico (not funded by WIPP)
- DOE to provide space at WIPP; NMED will lease space in Carlsbad

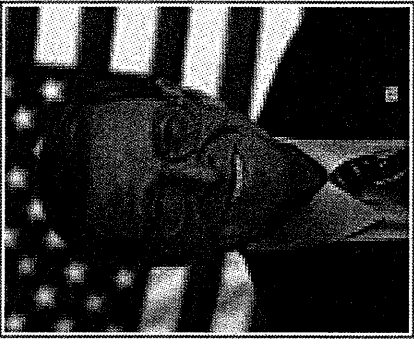


Focus of NMED WIPP Program Office in Carlsbad

- (1) monitoring discharges and emissions from the WIPP facility;
- (2) water quality monitoring in the vicinity of the facility;
- (3) air quality monitoring in the vicinity of facility;
- (4) radiological surveillance in the vicinity of the facility;
- (5) monitor soils, sediments, and biota;
- (6) transportation within New Mexico of transuranic waste to the WIPP repository;
- (7) characterization of transuranic waste at sites intending to ship waste to WIPP and their preparations for shipment;
- (8) review of submittals to NMED and other regulatory agencies
- (9) review current and historical data to assess contaminant pathways and risk levels;
- (10) provide information to Tribes, local governments and the public.



S.2403 DOE National Security Act for FY05



SEC. 3145. REVIEW OF WIPP, COMPETITIVE CONTRACT

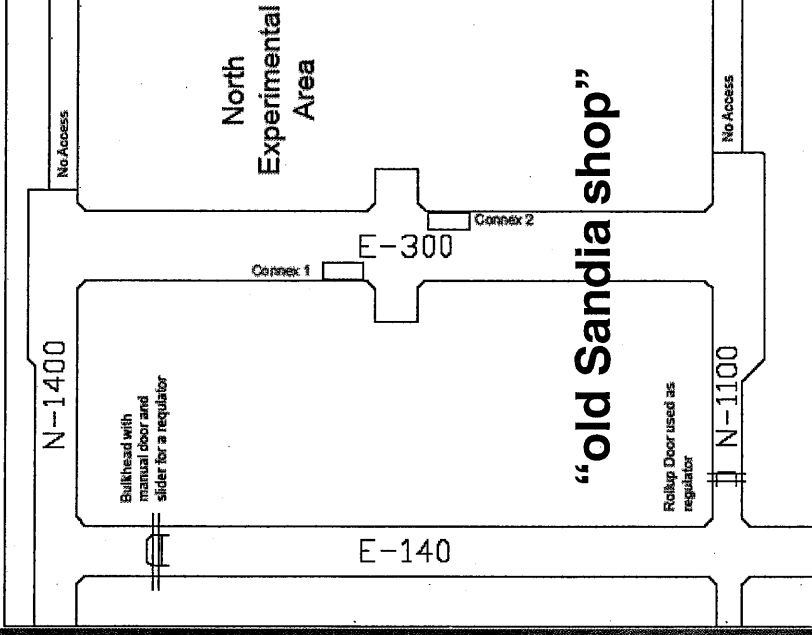
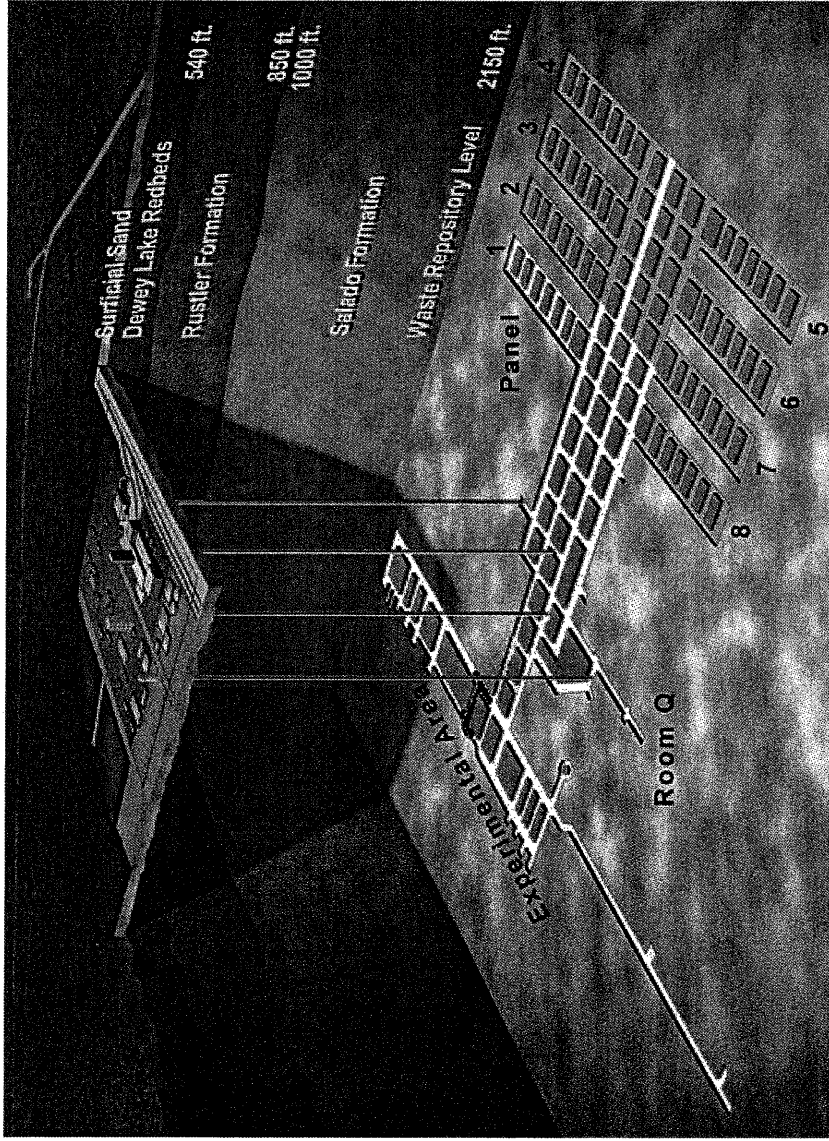
(a) Competitive Contract Requirement - period of one year, renewable for 4 additional 1-year periods

(b) CONTENT OF CONTRACT:

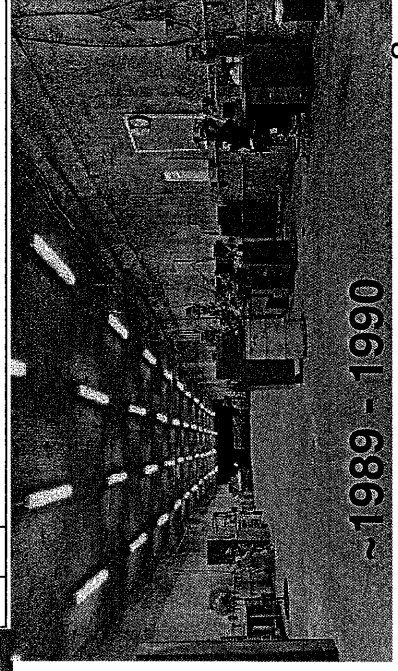
- (1) Director and Deputy Director (scientists of national eminence)
- (2) Director appoints staff (scientists and engineers of recognized integrity and scientific expertise)
- (3) Authorizes appropriate support staff.
- (4) The Director and Deputy Director appointed for a term of 5 years
- (5) Pay of professional staff equivalent to General Schedule under chapter 53 of title 5, United States Code.
- (6) The results of reviews and evaluations carried out under the contract shall be published.

(c) **ADMINISTRATION-** The contractor shall establish general policies and guidelines to be used ... in carrying out the work under the contract.

WIPP's FY04 Science Execution Plan



- Remove muck and scale floor and back
- Install "office quality" lighting
- Upgrade rock bolting and ground control



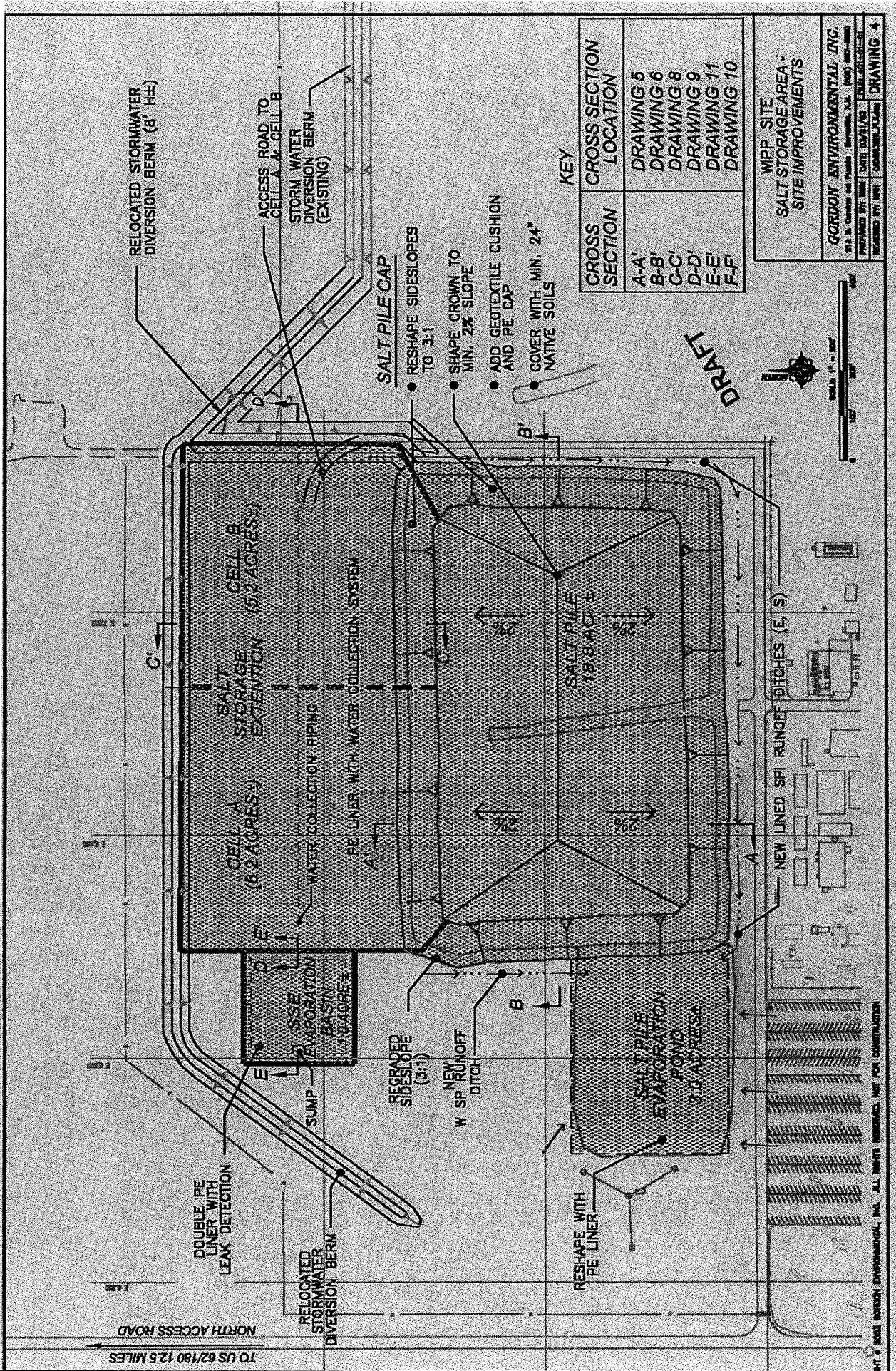
Waste Hoist Failure Event and Lessons Learned

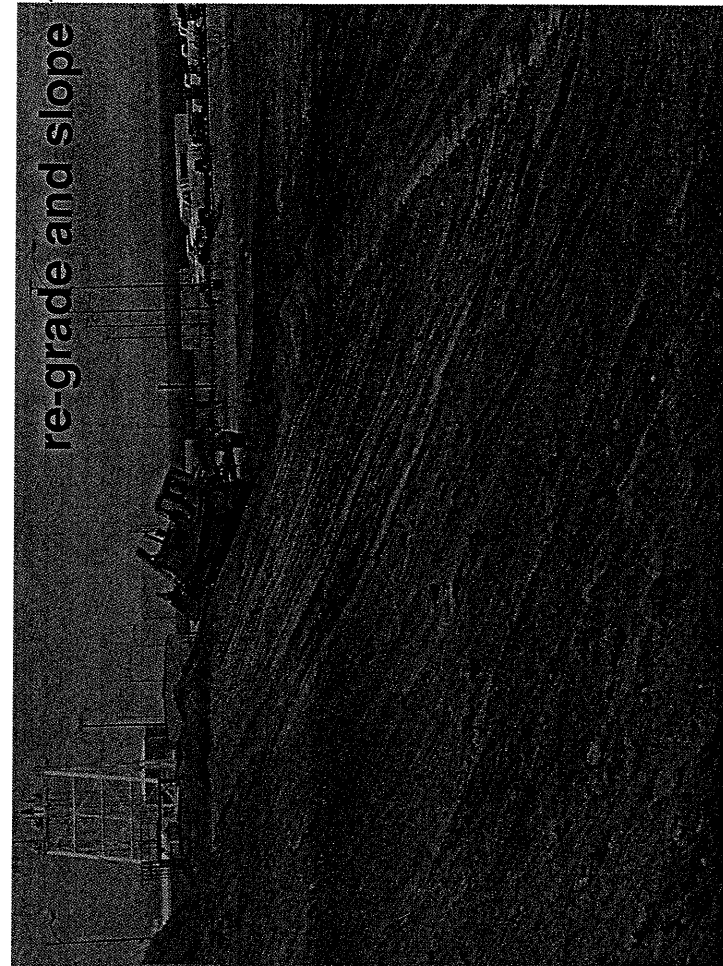
- May 20-22 Outage
- Required NMED approval of Temporary Authorization to allow more than 12 TRUPACT-II shipping casks at WIPP for 48 hours.

Lessons Learned:

- Failure of 25-year old electrical control system at its design life can occur even with routine inspection, aggressive preventative maintenance and adequate on-hand spares and supplies.
- Ensure sites can quickly accommodate shipment delays (close communication between disposal (mine) operations and transportation
- Overall system replacement (new equipment) will require extended shutdown so a complete solution will be difficult to achieve before FY06
- Above ground waste storage limit in HWFP should be increased to accommodate interruptions in facility operations due to repair or extensive preventative maintenance and to accelerate shipments.
- Problem would not result in catastrophic failure; problem is located in electrical control system. Hoist would come to a slow stop, or not move.

Update on Salt Pile Construction Activities





re-grade and slope



old haul road before



visual walkover before liner
placement



old haul road after

JUL 8 2004

New Cell "A" salt storage

~20 acres

New salt runoff evaporation pond

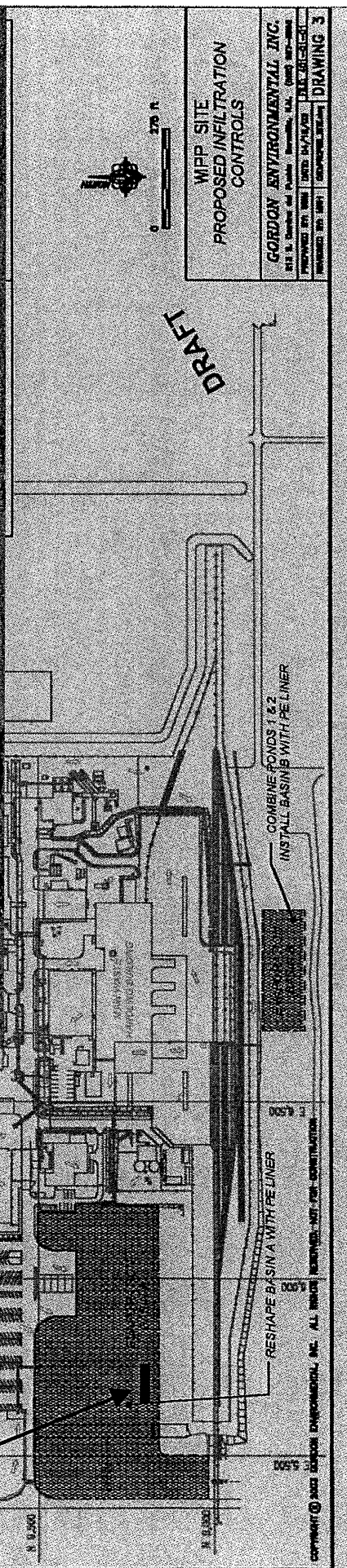
3 foot topsoil cover

MAY 25 2004

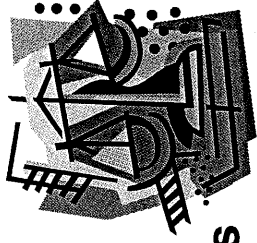
Domestic Sewage Release at WIPP - June 3, 2004

- Sewer line under Evaporation Basin A broken during grading and compacting operations late afternoon on June 2
- Repair initiated and completed on June 3 (~24-hour release)
- Metered sewage flow over open interval = 3562 gallons
- Majority (~90%) of flow went back into discharge line to sewage lagoon (max. estimate of 300 gal. lost based on visual estimate)
- Liquid leaked from 8" clay pipe onto highly compacted soil (being prepared for liner installation)
- 100 feet of sewer line replaced with Calcium hypochlorite application over entire length of damaged pipe
- All containment and repair work performed with PPE and proactive tetanus and hepatitis inoculations
- Notification to NMED Ground Water Pollution Prevention Section made June 8

2 Sewer Break



Citizen Lawsuit Against DOE, WTS, and CAST

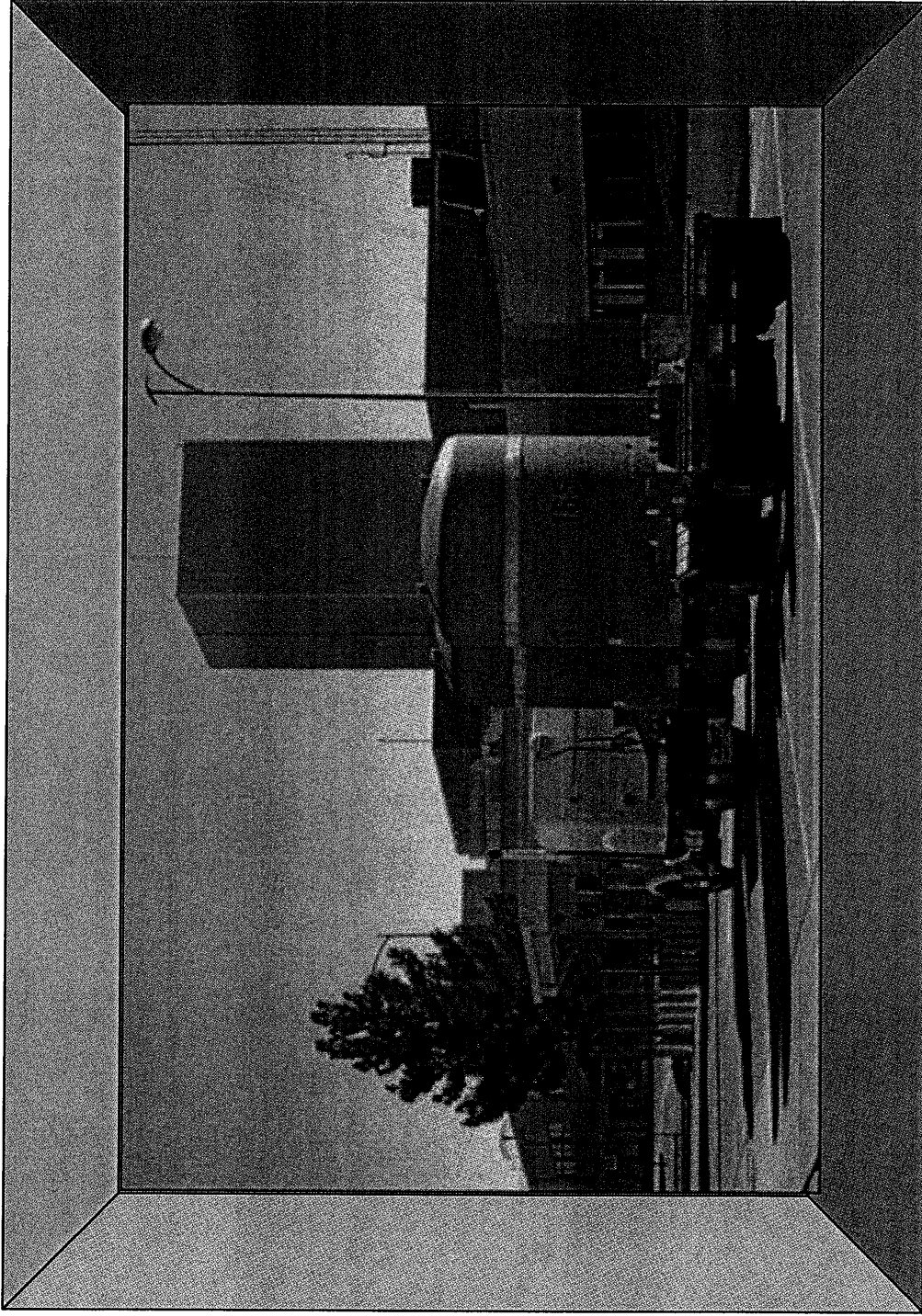


- CARD filed in state court (1999) consisting of public nuisance claims against DOE, Westinghouse, and CAST, and asked for an injunction to stop waste shipments to WIPP days before the first shipment
- DOE removed the case to federal court and CARD later amended its complaint to allege NEPA violations against the DOE.
- June 30, 2004, decision: Judge Armijo dismissed NEPA claims and affirmed the Department's NEPA process for the disposal phase SEIS, leaving public nuisance claims against Westinghouse and CAST in federal court.
- July 1, 2004 court issues: "Order to Show Cause," requiring Parties to brief issue of whether the case should be remanded to state court for resolution, since public nuisance claims are state law claims.
- Response to the Order to Show Cause filed July 16, 2004. CARD must file a reply within 14 days.
- DOE has prevailed on all litigation brought against it and by it regarding the opening and operation of WIPP.

Recent Records of Decision with impact on WIPP

1. Revised WIPP ROD – Decision to dispose of up to 2,500 m³ of PCB commingled TRU waste at WIPP
2. Revised Waste Management PEIS ROD – Decision to consolidate remaining TRU waste (approximately 25 m³ RH and 12 m³ CH waste) from BCL (Columbus, OH) at Hanford for characterization and storage until shipped to WIPP
 - Implementation contingent on ongoing litigation
3. Hanford Solid Waste ROD – Decision to continue to certify CH TRU waste for shipment to WIPP using existing facilities, modify T-Plant to certify TRU waste (RH and large boxes) that cannot be handled in existing facilities. Facilities to be sized to handle Hanford wastes and up to 1,550 m³ of offsite TRU Waste
 - No decision to ship any waste to Hanford for WIPP certification other than that remaining at BCL.

Questions & Answers...



July 20, 2004